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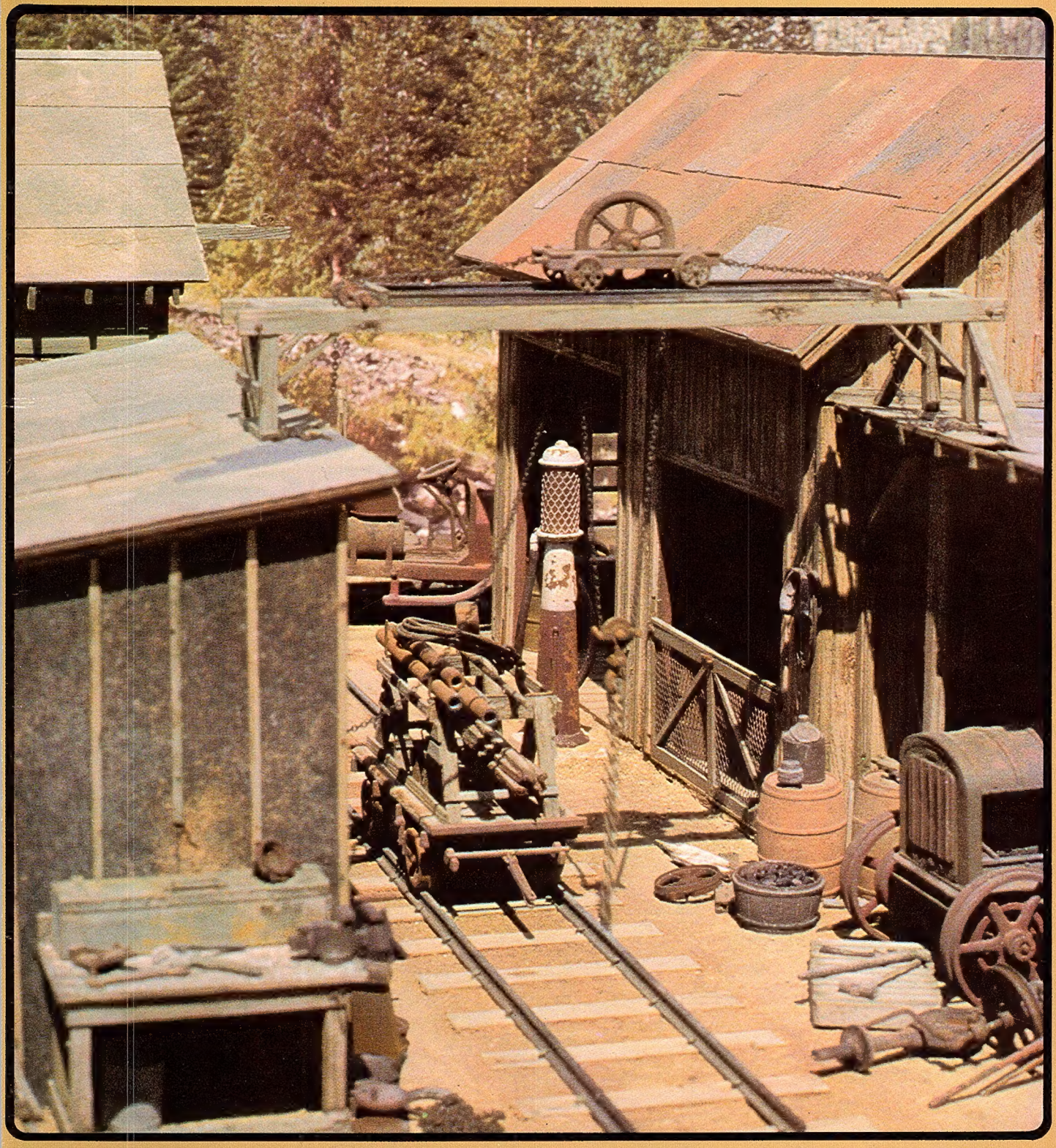

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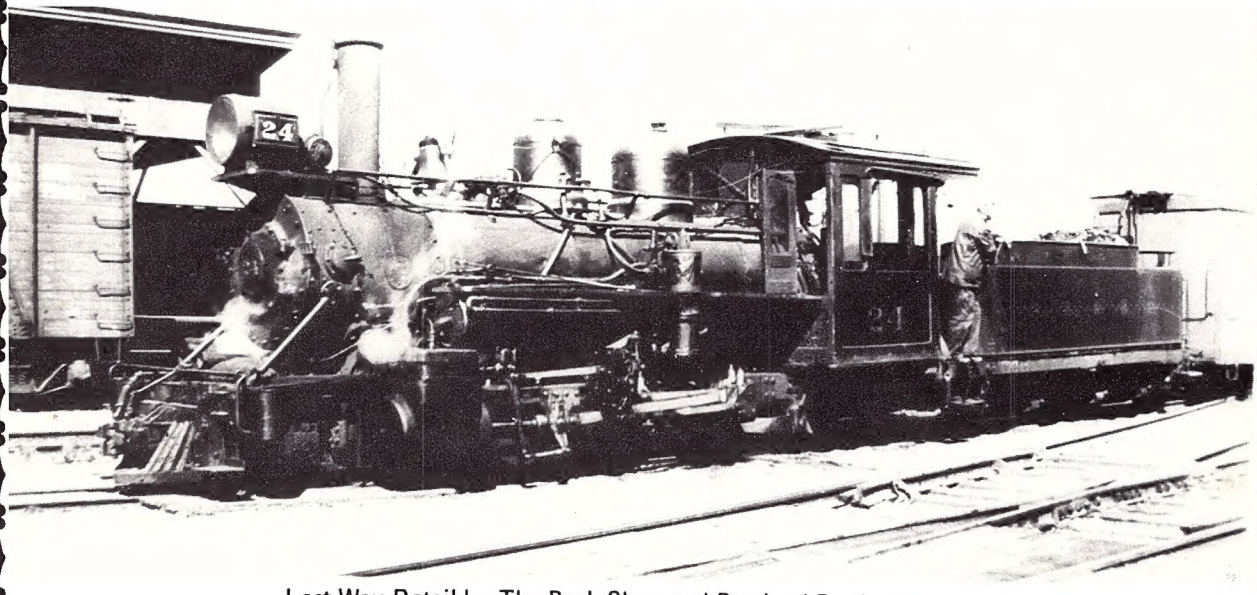

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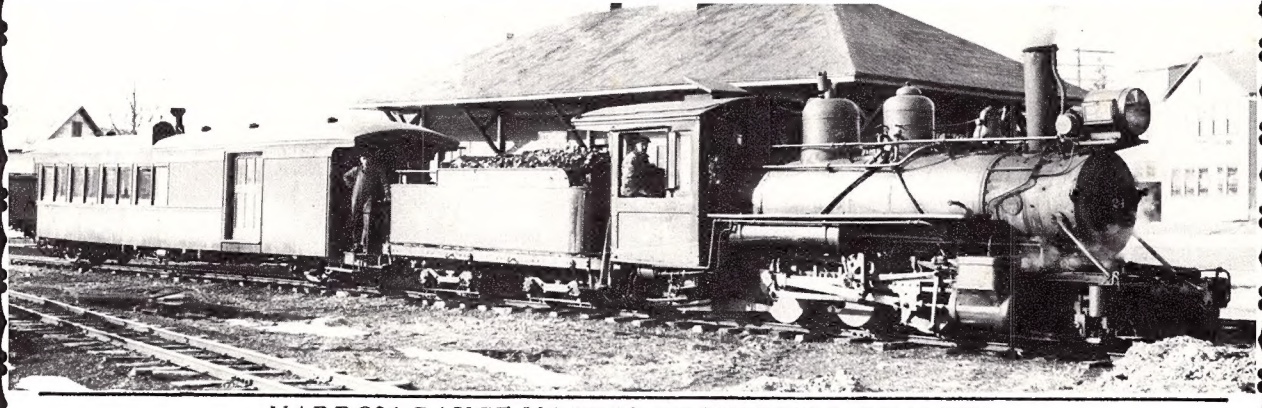

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NOVEMBER/DECEMBER 1981 VOLUME 7, NUMBER 5

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COVER

The visual impact of a highly detailed scene set in a small space is obvious in our cover photograph. Some techniques for doing this kind of detail work are described by Gary Nash in "Realistically Speaking" on page 41. *Photo by Gary Nash.*

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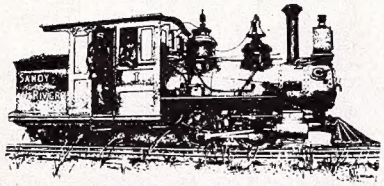

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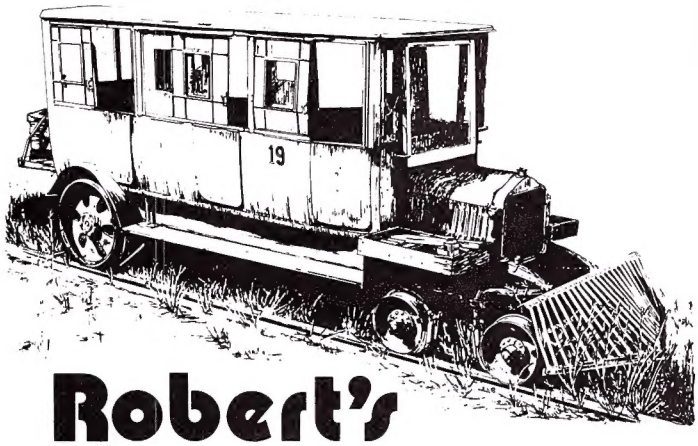

Robert's Ramblings....

Those of you who followed the beautifully built Slim Gauge Guild HOn3 layout will be pleased to know that, like a Phoenix, the Guild is rising from the ashes. The Guild now has northern and southern California sections. These groups are known as Slim Gauge Guild North and Slim Gauge Guild South. The southern group is still centered in Pasadena, California. They are discussing concept and scale and plan to build a modular layout which may be on exhibit in one of the hobby shops in Pasadena.

The northern group will be located in the south San Francisco Bay area near Mountain View, California. Tom Gallagher would like to hear from anyone who is interested in building a Slim Gauge Guild North layout. Tom has a lot available near Mountain View which has a 40-foot long refrigerator container which is already in place. The container is the kind hauled on trucks and is fully insulated. Tom also has the ability to have this container moved. He hopes the new group will build a modular layout which will form part of a bigger future layout. He hopes to actually move the container to the PCR Conventions. The new layout will be built in Sn3 and should be a fascinating and challenging project. Tom mentioned to me that there will be no dues. If you are interested in joining this new Sn3 group call Tom Gallagher at (415) 965-8414.

Now for some more mundane matters. I am glad to report that the **GAZETTE** is continuing to grow. However, along with this growth comes the need to process more and more orders. Remember that our staff is part time. I want to ask you again to help us by trying to follow these procedures:

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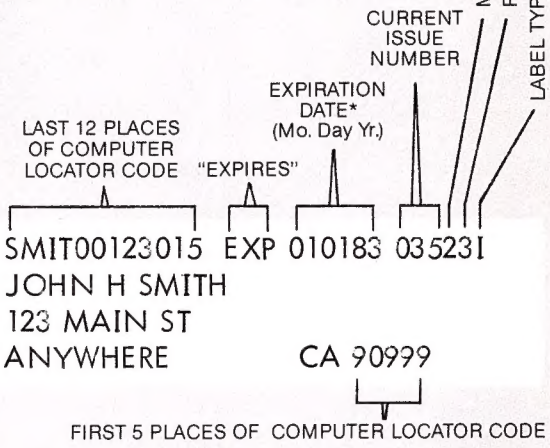
Remember our new **GAZETTE-MDC Locobashing Contest.** You have until March 1, 1982 to get your entries to us.

Bob Brown

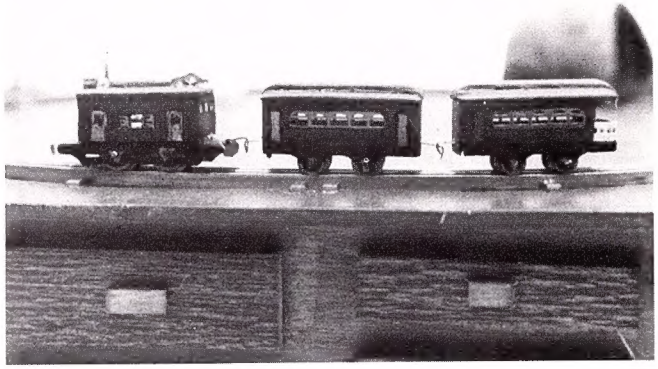
What are all those funny numbers?

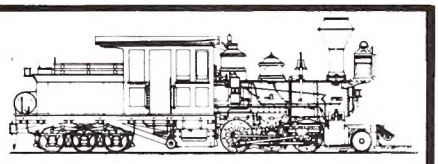
Some of you folks out there have expressed your bewilderment about those funny numbers at the top of the GAZETTE mailing label. They are really nothing for you to be concerned about; they're simply our way of keeping track of your subscription. But to satisfy you mystery hounds, here's what it all means:



*EXPIRATION DATE: Magazine dated this month is the last issue a subscriber will receive without renewing subscription. We always send a renewal notice before a subscription expires.

I want to share this model with you since it is designed to run around the Christmas tree and its just about that season. The model was built by Jim Jedlicka. It is an operating O gauge Lionel train set built to one-inch scale. In other words a working train for a doll house. The "layout" is designed to run around a one-inch scale Christmas tree. The model is scratch-built out of photo-etched brass sheet and is painted red. The locomotive is about ½-inch long and has a slug of steel inside its body. There is an electric motor under the table with a magnet which pulls the train around the table on 1/64 × 3/32 inch strip brass rails. It takes the train about eight seconds to go around once. Detailed scratch-building instructions for the train set will appear in the November and February issues of **The Scale Cabinetmaker.** The photo etchings for the train are available commercially.





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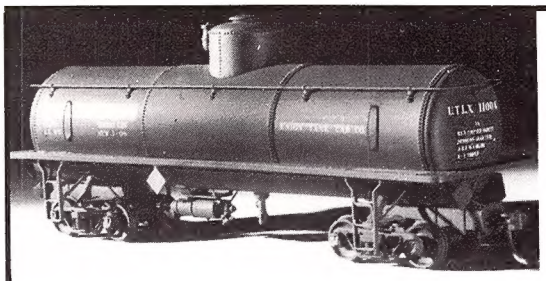

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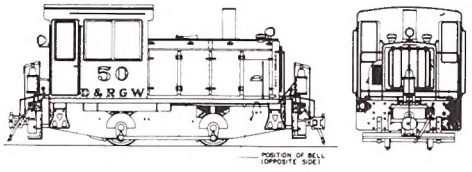

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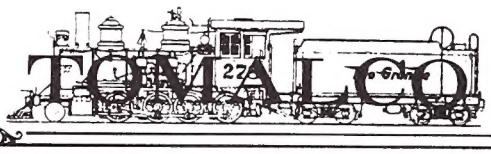

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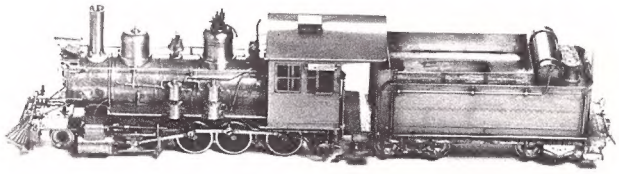

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The Pigeon Hole

Dear Bob:

Does anyone know about the New Haven Trap Rock Co. quarry at the gap between Wallingford and Durham, Conn.? Plant No. 2, I believe. I am originally from Durham and about 25 years ago saw several derelict saddle tankers there, narrow gauge as I recall. I have a notion to do something like their operation in On3 though not so extensive. I would be very pleased to pay for a few photographs of locomotives, rolling stock, quarrying, rock crushers, etc.

Another wonder seen in the area about 30 years ago – the State Hospital at Middletown brought in coal by barge on the Connecticut River, hoisted it up a steep bank with an inclined cable, then took it to the power plant with a short narrow gauge railway powered by a mini-diesel (or maybe gas). It was about abandoned when I saw it, no doubt replaced by trucked-in oil. Little did they know.

Many thanks for what ever information turns up and keep those **GAZETTE**'s coming.

Sincerely,
David Sawyer
Quaker City
Charleston, NH 03603

Dear Bob,

Please allow me to use your very fine magazine to extend my thanks and appreciation to Mr. Robert A. Bader and the Nevada-California Car Shops of Highland, California for a job well done on the design and manufacture of their superb On3 Southern Pacific Flat Bottom Gondola kit. The kit is excellent in every respect, from beautifully detailed and drafted elevation drawings to the Kappler Scale Wood and the detail castings correct for the Keeler Branch equipment.

As a devoted fan of the Southern Pacific Narrow Gauge for over thirty years, I am more than pleased to see manufacturers coming forth with Keeler Branch equipment and I hope that the future will bring more.

As a charter subscriber of the **GAZETTE**, I commend you and your staff on the production and publication of the finest scale model railroad publication on the market. I would (naturally) like to see more articles on the Southern Pacific Narrow Gauge (from all aspects) in future issues.

Thanks again, Bob, and the **GAZETTE**, for all your good work.

With my kindest personal regards, I wish your continued success, and

Happy railroading,
Joe Dale Morris

Dear Bob,

In reference to the article on the opening of the California State Railroad Museum in the **GAZETTE** (July/August, 1981, pages 40 and 41), I would like to note the following:

Precision Scale Company supplied many of the reproduction castings for the restoration of some of the equipment in the Museum collection. Many of the passenger cars had been completely gutted of their various brass fittings and for a period of some four to five years prior to the opening of the museum, PSC made parts for the equipment as each one came up for restoration.

For example, the several V&T cars and the little narrow gauge "Silver State" have PSC castings for their door, window and seat fittings.

Yes, Bob, even the full-size trains use Precision Scale Company brass castings!

David W. Braun
Manager, Precision Scale Co.

Dear Bob:

The Eldorado Mining Company has come to an impass that I hope you or one of your readers can be of assistance in helping solve. In order for the tracks to be extended to a recent find of a rich silver deposit we must bridge a valley requiring a structure higher than a trestle. On a recent trip over the famous Georgetown Loop it struck me that the type of bridge used there would fill the bill for allowing our tracks to reach the newly discovered vein.

I have not been able to locate the engineer responsible or even find any plans to allow our B&B gang to start construction. We've been in this business for quite some time and cannot recall seeing any plans for this type of structure having ever been published. I'll offer a share of honest to goodness no-good stock in the Eldorado Mining Company for any help or, better yet, why not publish something so all could benefit.

Sincerely,
Bruce G. Gathman
114 East Main Street
Harbor Springs, MI 49740

Dear Bob,

Help! Do you remember where you filed all the Colorado Central information? I'm kidding of course. But I am searching for information in the form of drawings or data about the Colorado Central. John Maxwell has drawings of two CC boxcars and I have seen photos of two CC locomotives after they were purchased by another railroad, so some data has been found.

If you know of anyone who is willing to share information please let me know. If the CC equipment was similar to other Colorado narrow gauge railroads, knowing which railroads would also be a great help.

As you can probably guess by now, I am still studying American narrow gauge and have not gained much knowledge about it. Thank you.

Jim Young
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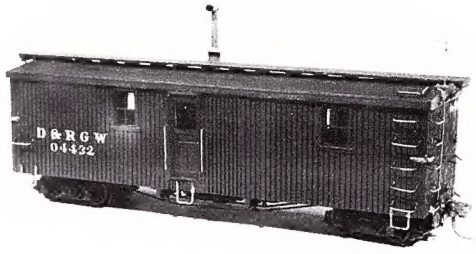

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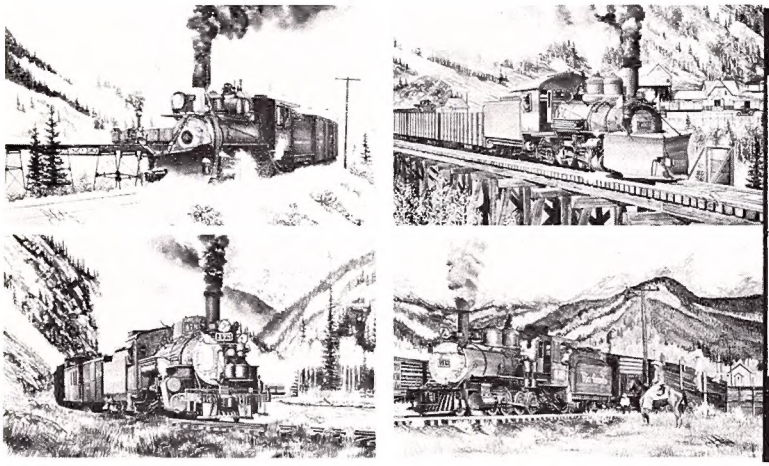

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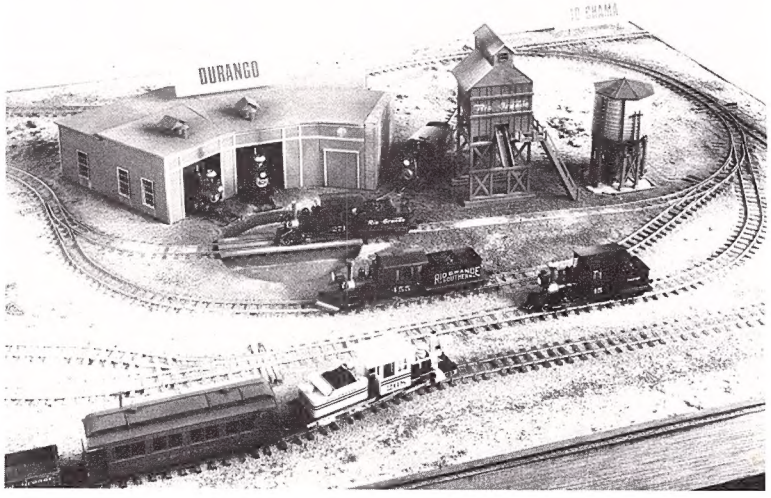

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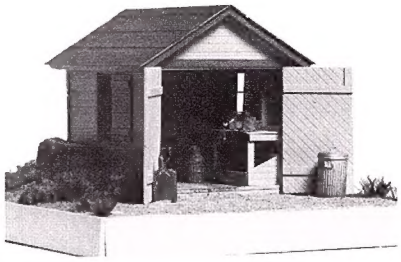

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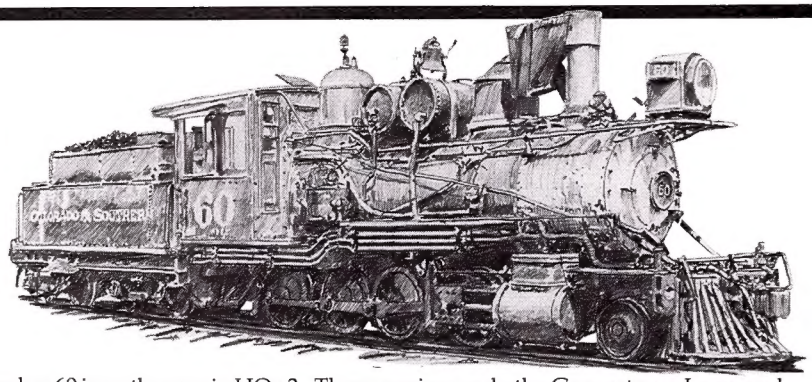

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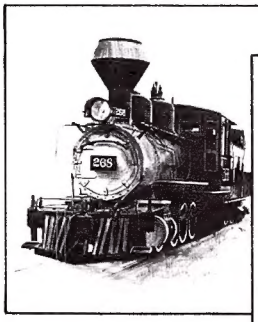

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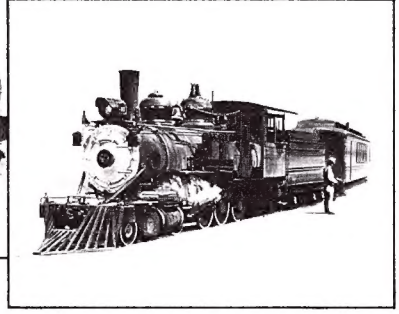

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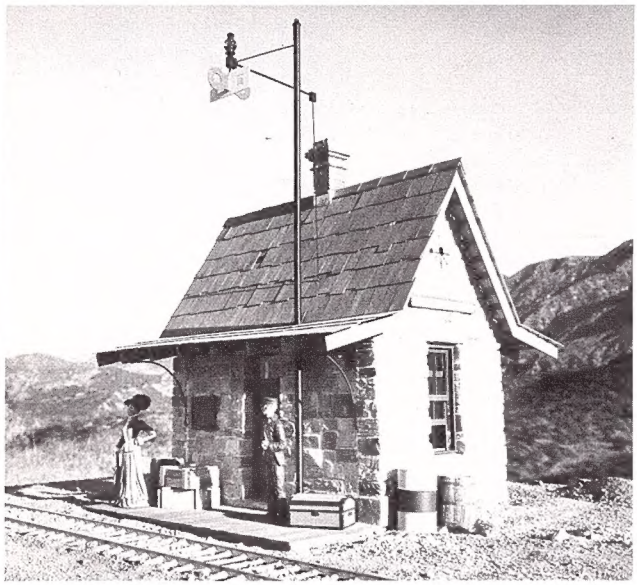

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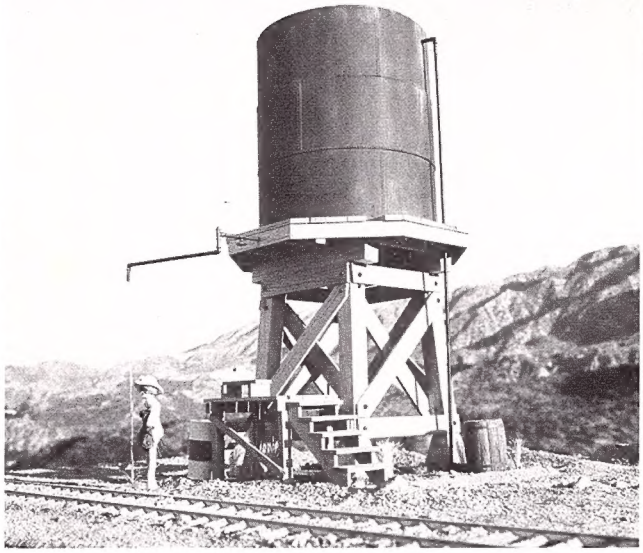

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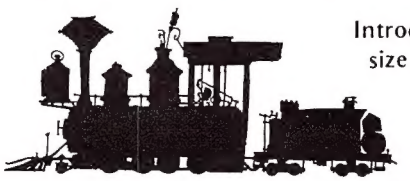

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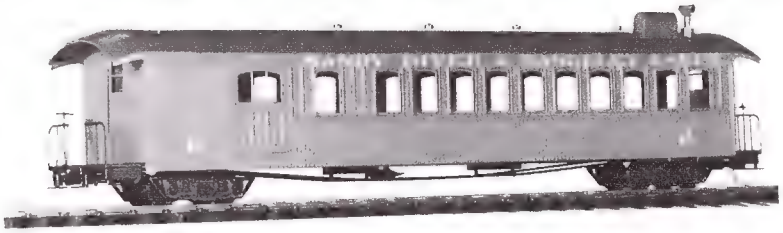

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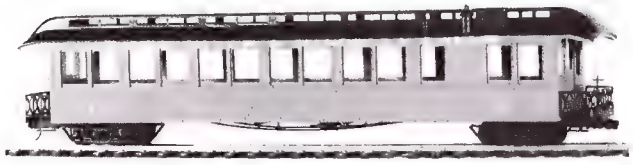

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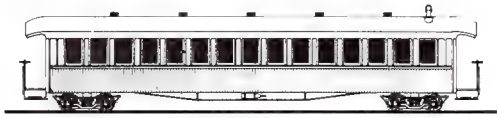

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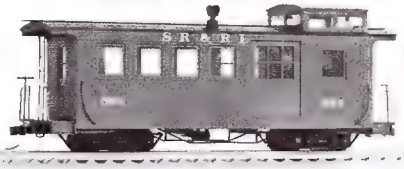

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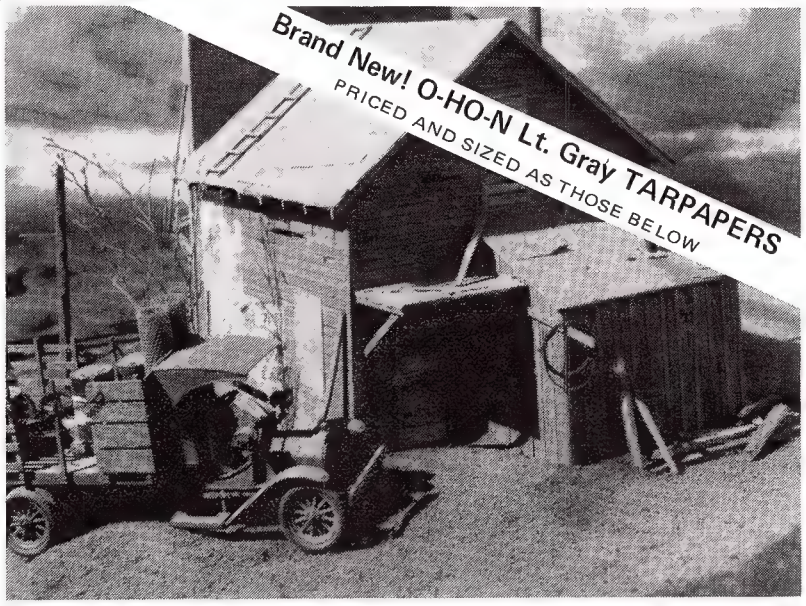

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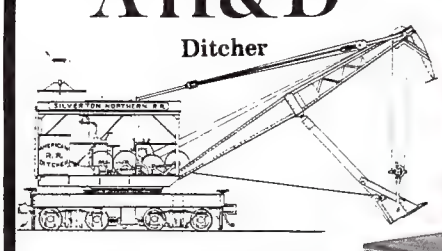

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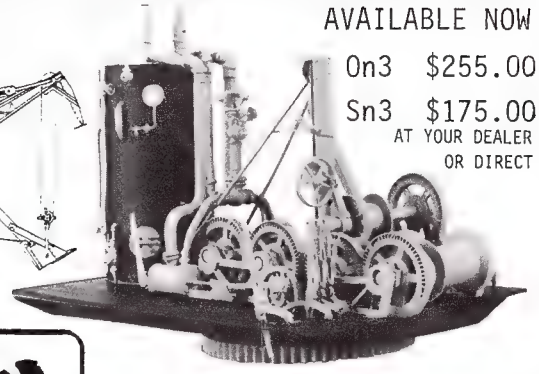

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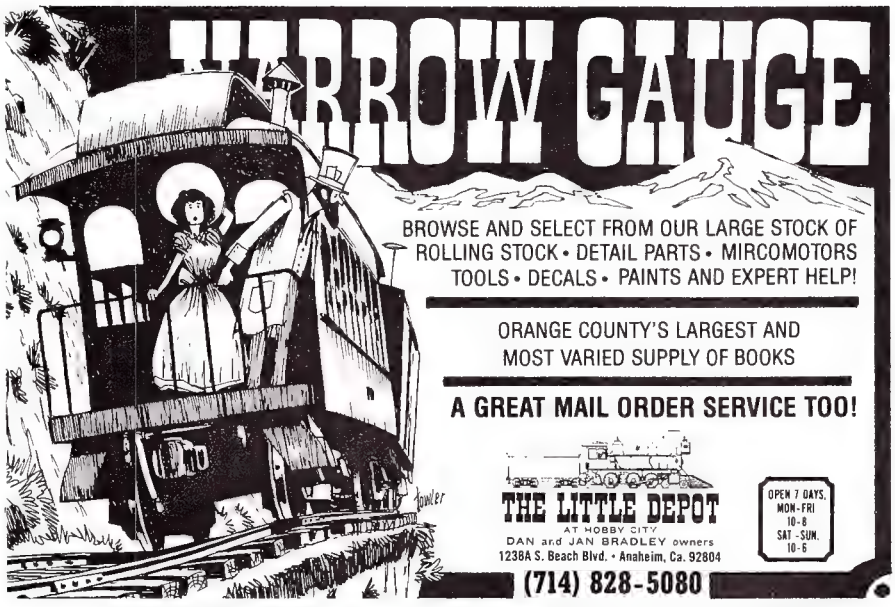
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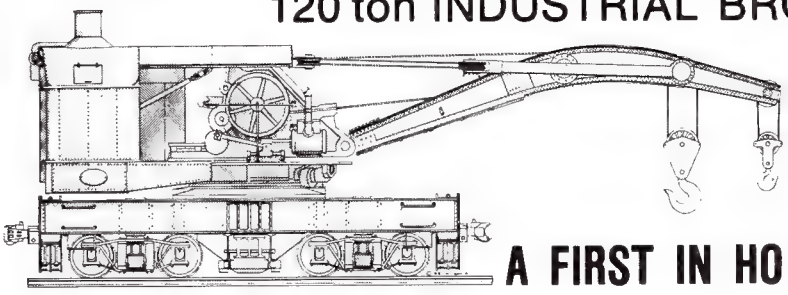

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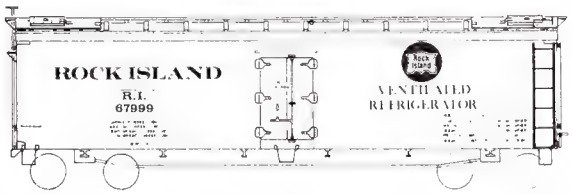

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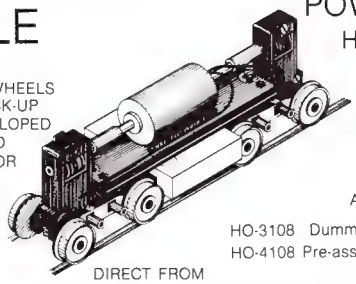

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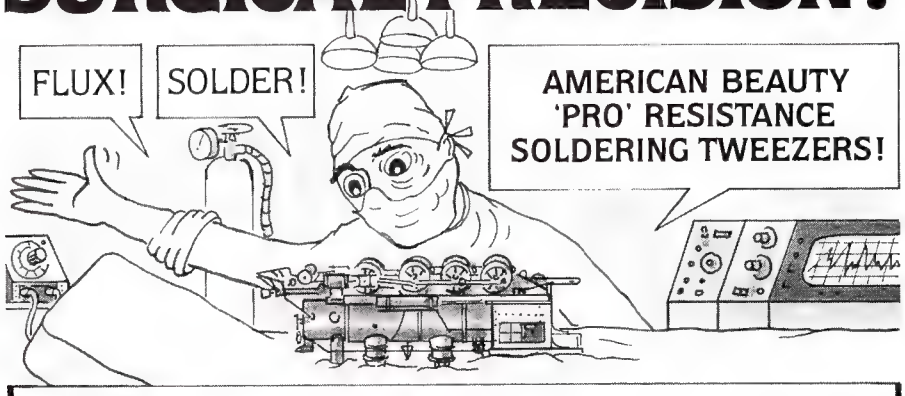

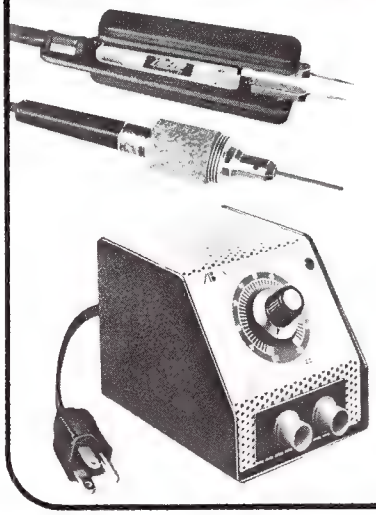

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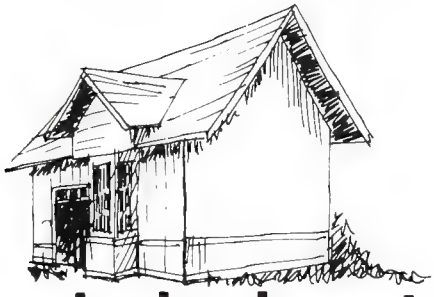

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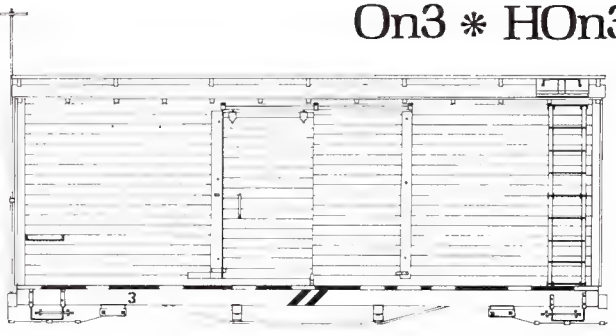

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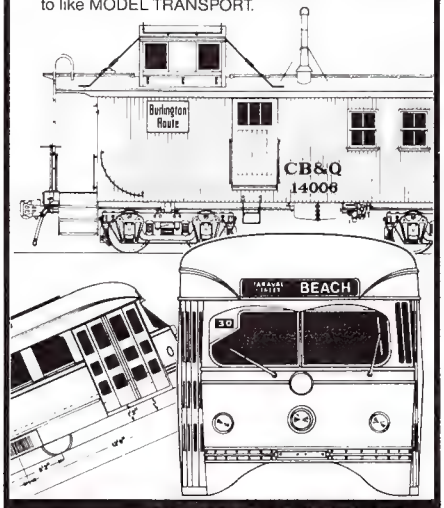

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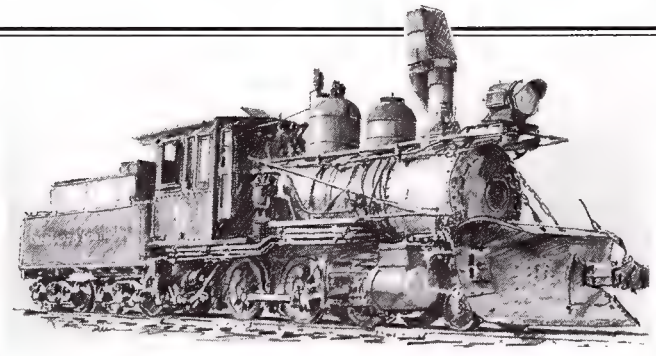

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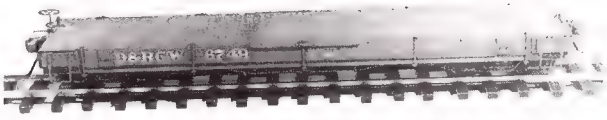
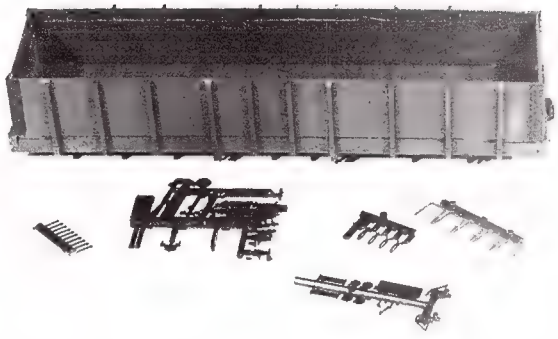
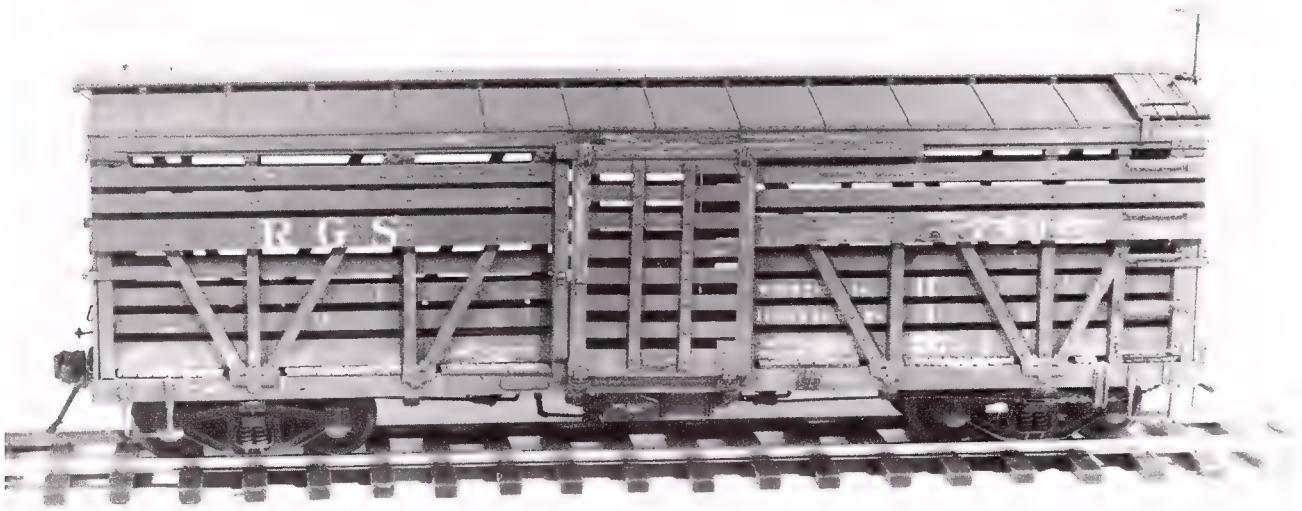


The Crossing Gate, 6468 Moraga Ave., Oakland, CA 94611 has released an On3 kit of the D&RGW 6725 series idler-flat car. The kit is composed of pre-cut Evergreen styrene, Grandt Line detail parts and trucks, and Thin-film decals. The kit assembly is straight forward and will be no problem to anyone who has assembled a few car kits. The instructions are complete and detailed. I suggest that some additional effort be put into distressing or weathering the styrene deck using a razor blade, Dremel tool, scribe, and various grades of sandpaper. My model was airbrushed with Floquil Rock Island Red. The deck was brushed with alternating dabs of Humbrol #20 Brown and #MC4 British Gray. The whole car was weathered with Liquitex acrylic artists' color to highlight the grain effect and distressing. I added decals and airbrushed the model with Floquil Dust and Grime. The Crossing Gate is to be commended for their design, materials, instructions and the fact that everything except for glue and paint is in the box. The car sells for $34.95. *Gene Deimling.*

Crummy Products, 5655 Beechnut, Box 157, Houston, TX 77096 is now offering a false front for a three story building in both HO and O scales. The HO front is a one piece plaster casting and is shown in the photograph. The O scale fronts come in three pieces. The individual stories on the O gauge kit can be purchased separately so you can have a skyscraper if you wish. Both O and HO models are designed to take Grandt Line door and window castings which are not provided in the kits. The HO kit sells for $5.99 and the O scale kit sells for $9.99. The plaster castings are very clean and require very little clean up. *Bob Brown.*

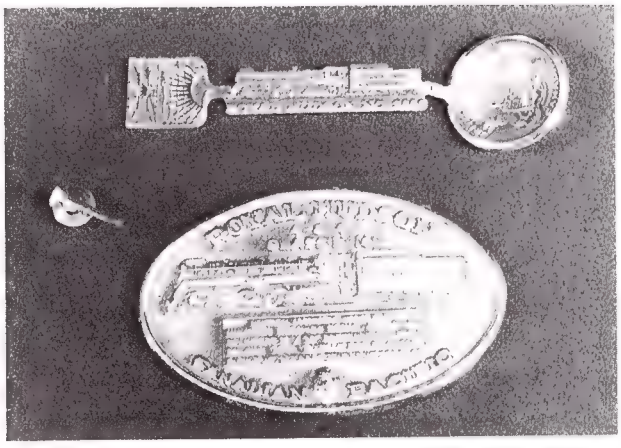


Clear Creek Models, 42 Greendale, St. Louis, MO 63121 has a new and easy to assemble D&RGW 1500 series high side gondola ready. The kit is entirely made out of styrene injection castings. The two sides have boards, stakes, and wood grain cast in. The ends are separate detailed castings, and the floor is cast in one piece with wood grain and body sills cast on. The floor has notches cast in for the side stakes. The main side body sill is also part of the side casting so you merely slip the floor in place so the floor boards show between the body sides and the main side sill, fit the ends, and glue the whole unit together. The body details such as corner plates, coupler pockets, body bolsters, steps, truss rod beams, and brake gear are all separate castings. The truss rods are nylon. The handgrab locations are indicated with little dimples. Handgrabs have to be bent and fitted in place. The cars are made to take Kadee couplers. These kits can be purchased with or without trucks and couplers. This is a relatively quick and highly detailed model of a very common Colorado gondola. Look for them at your dealer. *Bob Brown.*

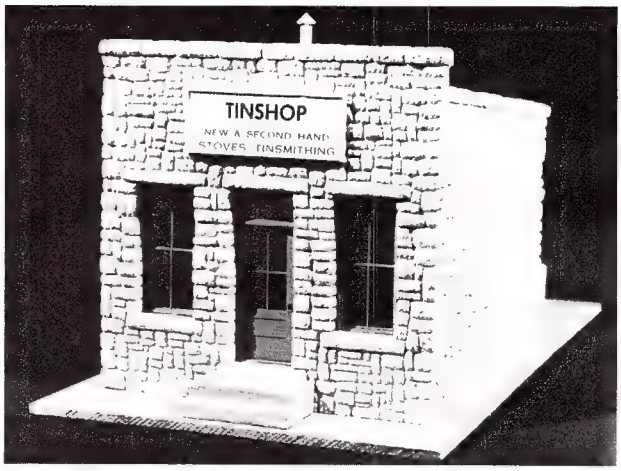


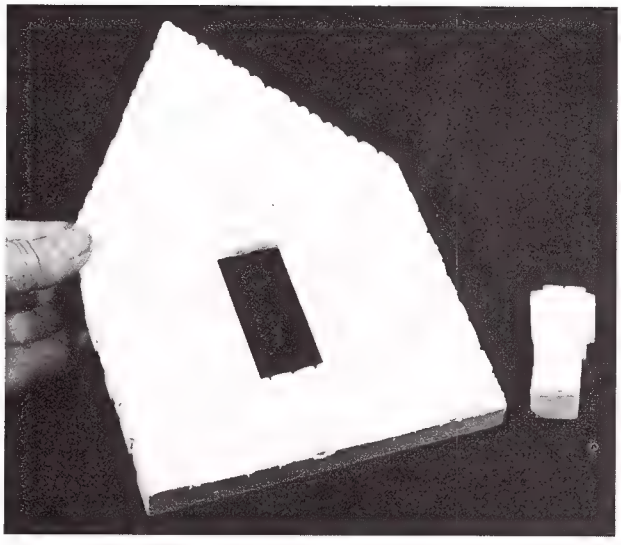
Grandt Line, 1040B Shary Ct., Concord, California 94518 has released an excellent On3 kit of the C&S/RGS steel underframe stock cars. The stock car kit consists primarily of black styrene moldings and Delrin for trucks, couplers, and fragile parts such as corner steps. 100 prototype cars (#7035-7134) were constructed for the Colorado & Southern in 1909-10 utilizing Bettendorf steel underframes and trucks. Following the major abandonments of 1937, 35 of the cars were purchased by the RGS in 1938, which renumbered them #7401-10 (single-deck) and #7451-74 (double deck). The kit includes everything needed for a single-deck version of either the C&S or RGS car. It should be relatively easy to build a double-deck sheep car version by working with prototype photos. Since the individual cars differed in minor details such as the location of the door handle, kick boards, and door stiffener plates, prototype photos should be used to build an accurate model of a specific car. Plans and instructions match the high quality of the kit's many detailed parts. The extensive and carefully explained instructions should make it relatively easy for anyone who has assembled a craftsman type kit to do a credible job. Excellent plans are supplemented by a "Parts Identification" sheet that saves considerable time. The construction sequence has been carefully thought out and explained – it really *should be followed* to ensure proper fitting of parts, especially for the basic box and underframe. Only a handful of parts are required to assemble the basic floor, sides, ends, and roof. For example, a side casting includes nut, bolt, and washer detail and the post and brace feet, as well as the framing and lower side planks. Real care needs to be taken to ensure that all parts line up and fit properly. Allowing sufficient time for these crucial early steps to set-up and dry properly is also important. As with all styrene injection moldings, parting lines should be removed and cleaned up. This is especially important in the case of the one piece floor casting to bring out the simulated ship-lap planking. While the initial assembly goes rapidly, a surprising number of detail parts must be added to complete the kit. Preformed grabirons are provided for the sides and ends; however, they will require some final straightening. The coupler lift bars and grabirons on the latitudinal roof walks must be formed by the modeler and involve some rather tedious eyelets that many may wish to simplify or omit. The stock car is a "fun" kit to assemble, an evaluation I have found to be shared by a number of other modelers. Though the first car will take longer, subsequent cars can probably be assembled in about ten hours or less. Painting is a critical step to achieve a realistic appearance with styrene and to do justice to the model's fine detail. Realistic results can be achieved by the use of light, successive oversprays which allow the various colors to bleed through. I used a Floquil Primer base coat, followed by Roof Brown, Foundation, Grimy Black, a 50/50 mixture of Boxcar and Tuscan Reds, Driftwood, and Rock Island Maroon. While the stock car is the first kit effort for Dave Grandt, its quality has been surpassed only by his father's Porter and drop-gon. *Keith B. Brown.*

Pressed Metal Products Ltd., 505 Alexander St., Vancouver, B. C., Canada. PFMP Ltd. has been producing cast buckles, spoons, metals, pins, and badges for 50 years. They are now offering a number of items of interest to people interested in railroads. Items being offered right now are a beautiful cast belt buckle commemorating the Canadian Pacific's Royal Hudson. This buckle is also available as a paperweight with a felt back. They also have a 1½ inch diameter coin, a very nice spoon, and a spike lapel pin. The company will also do custom work such as side frames, builder's plates or any other stamped or cast items. There is no minimum run and items can be made in brass, copper, gold, or sterling silver. So if you are looking for a source of special castings or would like to add to your collection of railroad art, look into these very fine products. *Bob Brown.*



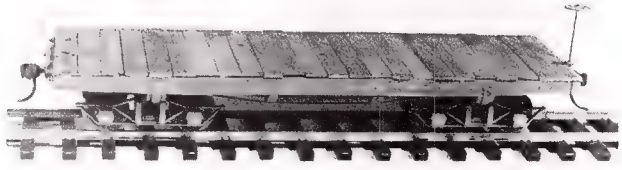
Kramer Model Works, Rt. 1, Lyman, NE 69352. I recently assembled the new Kramer O scale Tinshop. This kit went together very quickly and made into an attractive little shop. The kit is composed of four cast plaster walls, a set of plaster front steps, and a plaster loading dock. The windows and doors are plastic injection castings. Cardboard and brown paper are provided for the roof and a Grandt Line stove and oil drum are also included. An aluminum smoke stack and decal for the sign completes the kit. The instructions are clear. I had trouble coloring the plaster. It tends to soak up the stain. Make sure you use very thin stains because the plaster will soak up any pigment. However, Kramer says not to seal the plaster. The windows and doors fitted perfectly on my kit and the four walls fitted together easily. The brown paper was quite effective as tar paper. Kramer's Tinshop is based on a prototype structure. The kit sells for $34.95 in O scale and $22.95 in HO. I hope Kramer continues to issue structure kits like this one. *Bob Brown.*

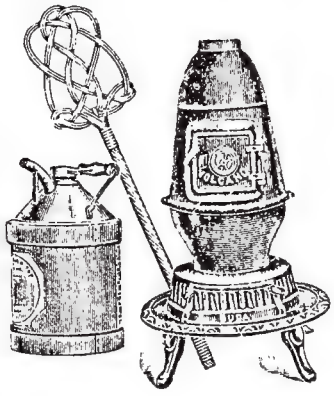




Thomas A. Yorke Ent., Box 65, Sunland, CA 91040 has entered the large scale field with a cast stone station in ½ inch scale. The model is designed to go along with LGB and is massive. The station is similar to the Yorke Falberg station issued in O and HO scales several years ago. I have one end, a side, and a chimney for review. Watch the **GAZETTE** for more detais on this new large scale line by Yorke. *Bob Brown.*

The Erection Shops, P.O. Box 518, Colma, CA 94014 advertised their first On3 car kit in the last **GAZETTE**. I have had a chance to assemble one of these kits. The car is an accurate model of a taper-silled flat car used on several western short lines. The prototype was a simple lumbering flat car and had no stake pockets, grab irons, or end-steps. its distinctive feature was the tapering side sills. The kit went together very easily. The wood is quite porous and will need to be sanded down. It was cut very accurately and all the little angles on the ends of the bolsters and truss rod pedestal beams are cut for you. The deck of the car is very unusual in that the wood actually has knot holes and a pronounced wood grain. It weathers very well. The car is well detailed with Grandt Line parts such as nuts and bolts, a brake cylinder with levers and rods, a brake wheel and MacLeod Carter Brothers trucks with Grandt Line wheels. No couplers are provided. The instructions are unusually detailed and were obviously written by someone who had built the cars. Detailed information is provided on assembly, adhesives, tips on assembling the trucks, painting, and coupler installation. This is a very well thought out car and I hope the Erection Shops continues to bring out On3 cars. The kit sells for $32.95. The first run is sold out so see your local dealer A second run is planned. *Bob Brown.*

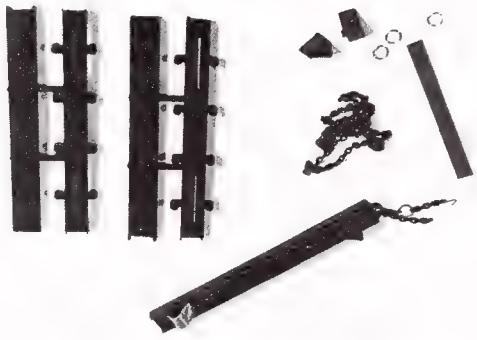




Bits & Pieces

What's New in Detail Parts

by Bob Brown

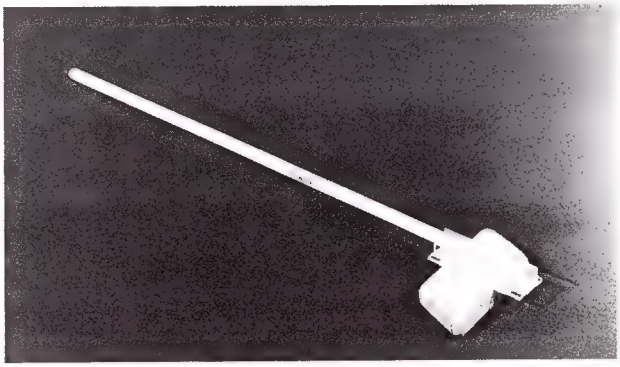


Detail Associates, Box 197, Santa Maria, CA 93456 has so many parts available that you will need a score card to keep up to date. So write for their list of detail parts in O, HO, and N scales, The photograph shows some of their new N scale parts. These parts are all cast in white metal and have crisp detail. *Bob Brown.*

Cave-Made, 2011 Fire Mountain Dr., Oceanside, CA 92054 has just issued a much needed product. Cave-Made has a new track-cleaning wand available. This wand is 12 inches long and has a movable end. You attach a Bright Boy track cleaner to the end of the wand using the sticky surface provided. The purpose of the wand is to allow you to reach those hard to reach spots on your layout. The wands come less the Bright Boy and sell for $3.00 each. *Bob Brown.*

Russ Simpson, P.O. Box 256, Smith Flat, CA 95727 has several new On3 car parts for sale. He has a set of PC&F steel log bunks in kit form for $6.00 a pair. These bunks are plastic injection castings with metal chocks which work when the chains are attached to them. Russ also has a set of plastic brake rigging which consists of the end straps and brake shoes for a pair of trucks. These sell for $2.50 per set. You can also buy 60 plastic grab iron ends for $1.25 and some brass truck bearings at eight for $1.25. Russ also has a newsletter which is well worth receiving. In it he lists all his new kits and parts. The new West Side box and caboose have been shipped so look for them at your dealers. Russ also has plans available for two West Side reefers and three West Side box cars. *Bob Brown.*

The Rock Quarry, 3008 Emerald Dr., Mesquite, TX 75150 is continuing to provide really fine bags of rock and dirt. The materials come in many sizes and colors and are uniform and pure. The bags sell for $1.25 for a 12 oz. bag. Some of the new bags of dirt are: Brown Fine, Chama Red Fine, Limestone Fine, Cinnabar Medium, Arkansas Red Fine, Mesa Brown Fine, and Coalyard Black Coarse. I have used these products on Tuolumne Forks and they worked very well. *Bob Brown.*



In Brief...

Lambert Associates, P.O. Box 4338, San Leandro, CA 94579 will import an On3 version of their recent HOn3 "frog-eyed" Pierce Arrow RGS galloping goose. Only a few will be imported. With their Grandt Line drive these should be excellent. Lambert will also import Shinohara HOn30 track and turnouts as reported in the Narrow Gauge Scene. This track is code .060 with proper wide tie spacing for HOn30. It comes in a variety of lengths and radii ...

Campbell Scale Products, P.O. Box 121, Tustin, CA 92680 has a new Evaporative Cooler which was quite common before mechanical air conditioning. Two kits retail at $1.00. Also new is the release of Timberline's excellent Idaho Springs, Colorado mine at $15.95 ...

P.B.L., P.O. Box Box 749, Chama, NM 87520 may import an Sn3 C-19 next year. Upcoming are pine trees and aspens, and no, they are not just S scale ...

P.F.M., P.O. Box Box 57, Edmonds, WA 98020 will import three versions of the popular K-27 in Sn3 including RGS #455 with plow and big tender ...

The Original Whistle Stop Kit Company, 2828 Marconi Ave., Sacramento, CA 95821 has acquired the Classic Miniatures line of HO structures and will be releasing them piecemeal. The Ophir Depot is out now. All the CM line is based on actual historical prototypes ...

Creative Screen Process, 555 E. Airline Way, Gardens, CA 90248 has some new HO road decals as well as large size commercial signs and desk sets on silkscreened plastic bases. Included is an RGS galloping goose logo ...

Robert Grandt, son of guess who, announces a new series of pictorial books. The first – *Narrow Gauge Pictorial: Vol. 1, D&RGW/RGS Motive Power* will feature engines by numbers in 160± pages and photos. Should be out soon ...

Nevada-California Car Shops, P.O. Box 661, Highland, CA 90246 is producing a whole series of On3 SP narrow gauge and Carter Brothers narrow gauge car kits. A flat-bottomed gon is out soon to be followed by a flat car ...

Taurus Products, P.O. Box 6534, Orange, CA 92667 is producing a series of etched brass parts such as ornamental iron staircases, roof trim and freight car ladders, mostly in HO. Nice quality ...

Sundance Publications, P.O. Box 597, Silverton, CO 81433 will publish a series of books on the Central Vermont Railway. *Vol. 1, the Early Years – 1830-1886* will be out soon at $19.95. Six volumes are planned ...

Kalmbach Publishing Company's new magazine, *FINESCALE MODELER,* deserves more than a passing glance. Although geared toward the military modeler there should be some good technique articles. A test issue will appear in January. If it's successful, look for a quarterly publication ...

The Heritage Collection, Trains and Such, 4125-4th St. N. W., Calgary, Alberta T2K 1A3, Canada has a plan pack available. This set of plans was issued as a book at the 1979 NMRA Convention in Calgary. The set consists of 32 pages of plans and sketches of buildings, rolling stock, and line-side details. Most of the set is made up of HO scale structures. Many of these buildings would make fine models. There is a lumber yard, a brick oil company, sand house, several stores, three passenger cars and a caboose. The plans are detailed and of excellent quality. The sketches are well done and add to your ability to visualize the plans. The sets come on white paper stapled into book form and printed on both sides of the paper for $2.95. A set is also available printed on sepia paper on one side only for $9.95. The sepia set comes in an envelope ...

Vane A. Jones Co., 6710 Hampton Dr., E. Indianapolis, IN 46226 has a tree making material called Tanglewood Trees available. This material comes in a 6 inch by 24 inch sheet and is designed to be teased into a backdrop of trees. The material is a green packing like material and sells for $2.95 per sheet. A second item is a pair of ⅜ inch scale plastic brick sheets. These bricks can be used as large building blocks in O scale. The sheets are 20 inches by 8 inches by .100 inch. Two sheets sell for $6.95. The bricks are made out of high impact styrene and have been injected molded ...

Bar-One Company, 1437 N. Manzanita, Unit D, Orange, CA 92667 is offering a large number of black and white prints suitable for framing. Each print is 16 × 20 inches and sells for $6.00. There is a nice dockside scene, a large logging Shay, and an SP narrow gauge 4-6-0 at Laws in the series. Other prints of interest include a West Side Shay, a D&RGW K-class engine and a V&T loco. Write for their illustrated list of prints and other items of railroad interest ...

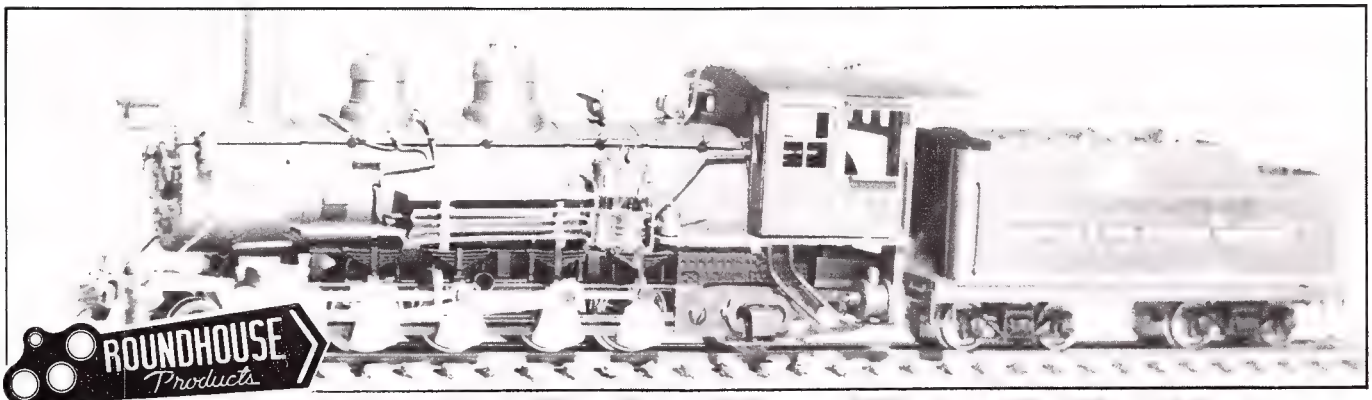
Choo-Choo Barn, Rt. 741 East, Box 61, Strasburg, PA 17579 has a series of O-S scale cast accessories on the market. We have not seen these parts. Their price list mentions a picnic table, lawn mower, barbecue, bicycle, drill press, metal lathe, and a service station set. The parts sell for $1.00 each except for the service station set which is $3.75 ...

Ye Olde Huff-N-Puff, P.O. Box 53, Penna Furnace, PA 16865-0053 has taken over the manufacture and sale of the S scale line from Stewart Products. The parts are ready for immediate delivery. They have also added a line of S scale box and refrigerator car kits to their line. Write to them for their latest list of parts and kits ...

Mark D. Hall, 1063 Washington St., Whitman, MA 02382 has a new listing of his extensive line of built-up On2 freight cars. These cars come less trucks and couplers. Mark also has several body kits available as well as a pulp wood rack kit. The cars run from $38.95 for a SR&RL box car with interior detail to $15.50 for various flat cars. There is a B&H caboose available for $44.50. A basic wooden kit for a box car sells for a $4.00. There are 25 cars listed plus the kits ...

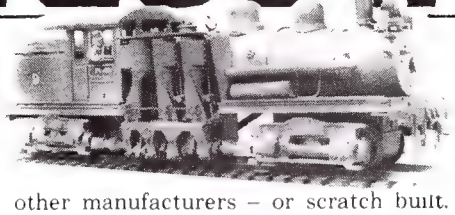
Timber Creek Dry Transfer Co., 739 Chestnut Ave., San Bruno, CA 94066 is offering a much needed service. They will custom make thin and easy-to-use dry transfers. These dry transfers are thinner than usual so when they are pressed down they don't look thick. Timber Creek will prepare your art for $10.00 and up. A 3½ by 5½ inch sheet of letters in one color or in black and white sells for $5.00. They will also convert decals into dry transfers for $5.00. If you have some special lettering needs, contact Timber Creek ...

Don Winter, 4553 South Field St., Littleton, CO 80123 has a delightful new catalog of large scale cars and parts for sale. The catalog lists eight car kits to be issued in 1:22.5 scale. The cars will be wood, white metal and plastic and save for one are all four-wheelers. All the individual parts for each car will also be available. The cars are planned to be simple and rugged but yet well detailed. The catalog describes the reasons for working in this scale and then shows a drawing of each of the cars. There is a price list of parts at the end of the catalog. Even if you do not plan to model in this size I think you will find the drawings worth using as inspiration in any scale. The catalog sells for $3.00. If you are interested in large scale models don't miss Don's new magazine *The 1:22.5 Digest.* He describes it as a *Finelines* like magazine which will be bi-monthly and sells for $10.00 per year in the U.S. and $12.00 in other countries ...



CONTEST TIME!

ANNOUNCING. . . . 2 ND. MDC-GAZETTE LOCO BASHING CONTEST



FOR CONTEST DETAILS
WRITE **GAZETTE**
DO NOT WRITE TO MDC

MDC-**GAZETTE** Great Locobashing Contest. It's all for fun and to encourage you to try your hand at kit bashing. The rules are pretty simple. All entrants should send a long SSAE requesting the "official" rule sheet to the **GAZETTE**. Model should be recognizable as coming from the stock engine, but there is no percent limit on parts you can use from other manufacturers – or scratch built. On3'ers and Sn3'ers can try their hands at HOn3 or you can convert your engine into an On2 or Sn21/2 or an HO 2-8-8-2.

Judging will be done by the **GAZETTE** staff and will be based on originality and execution. Employees of MDC and the staff of the **GAZETTE** are prohibited

First prize is a $100.00 savings bond and two-year subscription to the **GAZETTE**; second prize is a $50.00 savings bond and two-year subscription; and third prize is a $25.00 savings bond and one-year subscription. Three honorable mentions will get a one year subscription. Everyone who enters will receive a certificate.

WRITE The 'Gazette' Magazine, One First Street, Suite C, P.O. Box 26, Los Altos, CA 94022 - Send SSAE !!!

P.O. Box 926, 3811 W. Rosecrans MODEL DIE CASTING INC. Hawthorne, CA 90250

HO SCALE structure kit

Introducing our newest structure kit.

Preproduction model shown.

Foothill Station captures the quaint mountain styling of a small combination branch line station. This design does not follow a specific prototype, but is a composite to represent a 1910 era station with upstairs living quarters, track level waiting & freight room, and a basement storeroom. The completed model occupies a space approximately 8" x 6".

This kit features the excellent die cut siding from KAPPLER, plastic castings from GRANDT LINE, as well as special DETAIL ASSOCIATES door castings. As usual our complete illustrated instructions with special templates for building and locating your model in the side of a hill.

Kit #7003

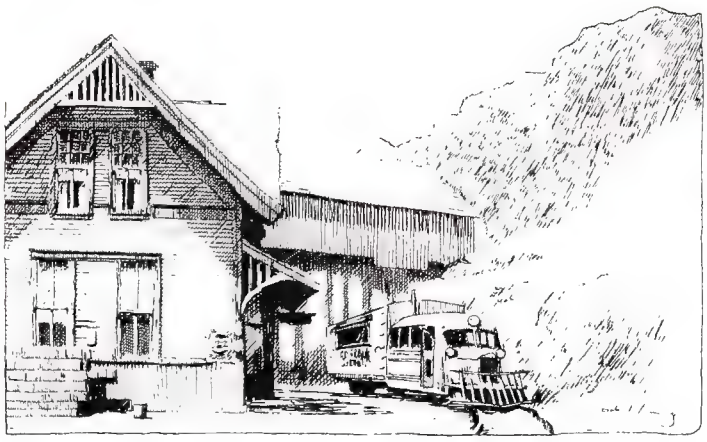
FOOTHILL STATION

S.S.A.E. FOR PRICE LIST

PRICE $35

DETAIL ASSOCIATES
BOX 197 SANTA MARIA CA 93456

The Narrow Gauge SCENE



by Charlie Getz

THE "CUTE" NARROW GAUGE

Cute! That's the infamous word that makes all we mature model railroaders cringe whenever a visitor looks at our latest masterpiece and pronounces it to be – er, "cute". Yet it's the only word I can use to describe some of the new HOn30 equipment being produced in Japan.

Not just "cute" but really terrific and other such superlatives. So much so that the Flying Zoo's HOn30 display layout was an unqualified hit, both at the recent NMRA national *and* the Narrow Gauge Convention in St. Louis. Displayed were some of Joe Works' newest creations. Unlike earlier offerings which have fallen into two broad categories – "foreign" and Maine 2-foot prototypes, these newest engines and cars are more caricatures of the real thing than attempts to follow a specific prototype. Yet these caricatures capture the flavor of individual roads and locomotives. The Flying Zoo had little models of RGS #455 (with oversize cab and snowplow), a C&S Mogul with beartrap stack, and D&RGW C-16's #271 and #268, the latter, pictured, in full bumblebee regalia. Called "Rio Grande Mini-Land", this series of engines also includes a Mason-Bogie 2-6-4T which is *almost* on target, and a Mich-Cal Shay. (Some of these are now available, and some will be available next year.)

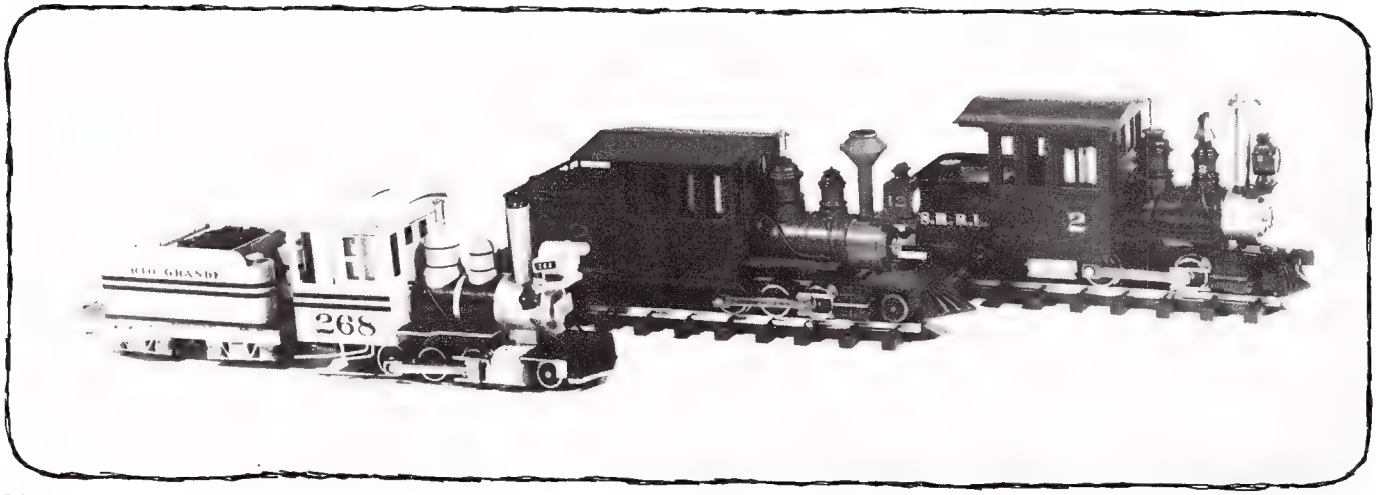
Those engines plus some brass D&RG-style passenger cars, caboose and *new* Shinohara track and switches could well cause a small explosion of interest in this small scale. As you know from past columns, I have long been a booster of HOn30 *and* On30. A lot of us model narrow gauge due to the quaint character of the equipment, HOn30 carries that to an extreme, but an appealing extreme. Who can deny that the primo HOn30 team, Frary-Hayden, haven't inspired and enchanted with their Elk River Line, Thatcher's Inlet and Carrabasset and Dead River? Who can disagree that HOn30 or On30 allows a lot more railroad in a lot less space, yet not at the expense of detail? Heck, there were even a few real 30-inch lines around. And while most folks use 30--inch gauge as a convenient way to model two-foot, this new Mini-Land equipment shows you can even approach three-foot lines. The field, my friends, is wide open.

The main advantage, in my opinion, is the freelance possibilities of this gauge. Your imagination is the only limiting factor. The coming months will see an increase in equipment and track, and indeed, with the exception of an inexpensive ready-to-run engine, all the components you'll need to get going are now available. Shinohara's Code 60 HOn30 track and switches, to be imported by Lambert, are especially welcome. Ditto the new Baldwin Mini-Land offering from Flying Zoo, these super nice precisely made locomotive kits are available at $49.95, and possibly built-up later for $79.95.

Bob and Gene each assembled a different Joe Works locomotive to report on in this issue. Bob, true to nature, was fascinated by an English-style engine. Gene, ostensibly to try out his soldering tweezers, tackled a Shay. Their reports follow:

First, Bob:

When I saw all of the little Joe Works, HOn30 locomotives at the NMRA convention I just had to try one. I decided to assemble the little "Gamecock" engine which is a British prototype. This little locomotive is only available from Victor's, 166 Pentonville Rd., Islington, London N1 9JL, England. Victor's is one of the **GAZETTE***'s largest dealers and has been in business for many years. Joe Works produced the "Gamecock" especially for Victor's. The locomotive sells for $57.95 including postage. I found the model quite easy to assemble. The frame is a plastic casting; you just ACC a metal pick-up to the frame, ACC the worm onto the motor-shaft, snap the motor onto the frame using the cast-in hold-downs, and make sure the pick-ups are touching the motor correctly. Put the drivers in place, attach the metal cover plate and you're ready to run. There are no side-rods on these little engines. The cylinder block screws together but you have to solder the*



cross-head guides in place. The cross-heads attach to the piston rods which then are pinned into the rear drivers. All very easy. My engine ran smoothly and responsively right away. The superstructure consists of chem-milled sheets of brass. You snap the parts out and bend them to shape. The parts are milled on the back so they will bend correctly. Some of the parts were already folded such as the curved saddle tank. My smoke box did not reach down to the deck plate but that is the only part that did not fit. The details are all white metal or brass turnings. I can't tell you how much I enjoyed assembling this little jewel of a model. It was really a pleasure. Now I am looking at these mechanisms as the source of motive power for an 18-inch mine operation. Makes you think, doesn't it?

Gene Deimling tried one of the Joe Works Shay kits at my request, and did a superb job. Let him tell you of his experience:

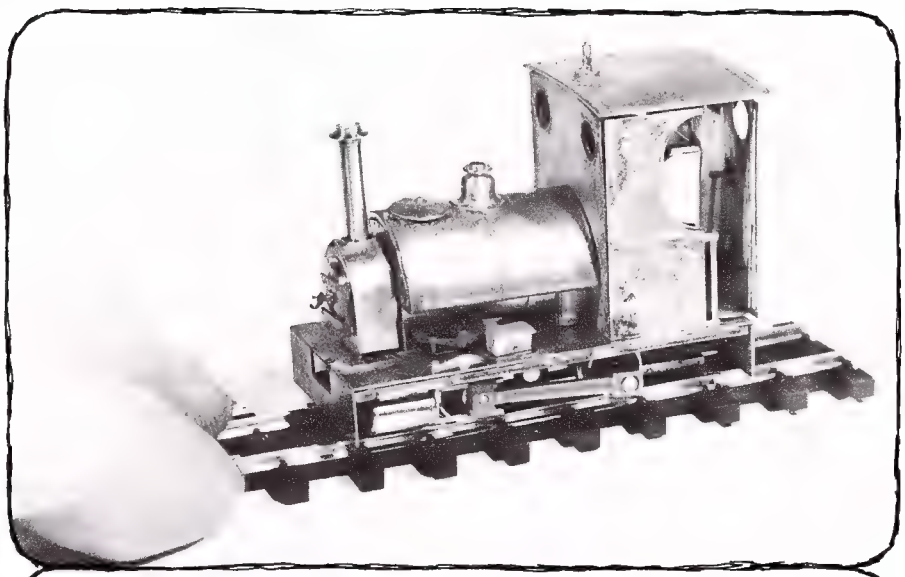
The Joe Works Shay kit is a collection of precision turnings, engravings, lost wax castings, Zamac parts, a three-pole open frame motor and gears. The instructions are in Japanese but are full of excellent isometric drawings. All the screws and wire are called out in metric sizes.

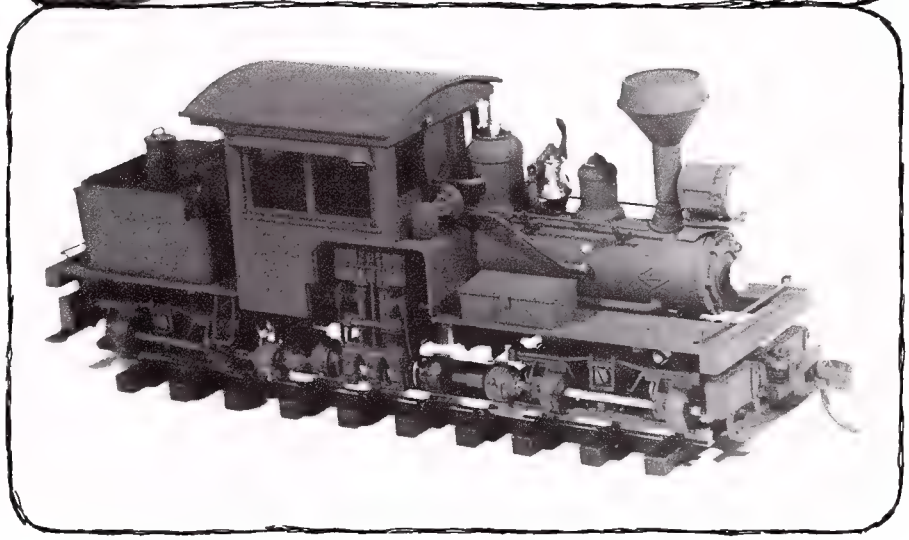
Assembly of the superstructure presented no problems. Take care to make sure the inner cab walls are bent carefully so the outer shells fit around properly. The boiler must be mounted perpendicular to the front of the cab or the superstructure won't fit on the frame.

The mechanism went together neatly and runs quite well. You need to be careful in how the idler gears are installed in the trucks. There is only one way that they will mesh with the geared axles. The wheel sets have the di-electric side on the side with the concave wheel face. The convex side is conductive. The chassis-mounted drive shaft needs to be knurled on each side to keep the plastic universals from slipping. This can be done by rolling a file over the ends of the shafts.

The mechanism ran smoothly from the very start. The overall speed range and control is quite good. Starting and slow speed performance suffer from marginal power pickup. I replaced the brass boiler weight with Cerro Bend since it is heavier than brass. More weight can be added to the cab. Once the model was weighted down it ran quite reliably.

I modified the pilots to accept Kadee N gauge couplers. This took as long as building the complete model (about eight hours). I slotted the pilot the width of the Kadee draft gear. Metal removal had to be done by hand since the pilot castings are very difficult to grasp in a vise and won't take very much stress from machining. I then soldered a length of .064 inch square brass flush with the bottom of the opening. This piece should be drilled and tapped for a 00-90 screw. I mounted the Kadee draft gear box on this brass piece. I hope that Joe Works will consider modifying their pilot casting to accept a Kadee coupler.





I added a generator, handrail posts, and a new bell. You could also add an air-pump or different smoke stack. The basic model offers a lot of possibilities for creating a unique little Shay.

We'll be reporting more on HOn30, as this appears to be an area of growth in our hobby. If *you* have information, photos on ideas, drop me a note. And one final sign that HOn30-On30 has come of age is the new "HOe" society ("HOe" is the European designation for HOn30). The laudable and ambitious goal of this group is to create uniform standards for HOn30 equipment and track. Check the October 1981 **RMC** for details.

By the way, Sango and Joe Works' engines and cars are available from Flying Zoo, Shokichi Rm 202, 3-61-31 Izumi, Suginami Tokyo, 168, Japan. Columbia Car and Foundry, P.O. Box 185, Rainier, OR 97048 will also be importing and marketing this equipment directly, as does Coronado Scale Models, 1544 Cypress St., Phoenix, AZ 85006. Watch the **GAZETTE** for more information.

In the news, congrats to Bob Richardson and the whole crew at the Colorado R.R. Museum for the 100th anniversary of C-19 #346 of D&RGW fame. The subject of a new book, #346 has led a long and varied career, and was saved from the scrapper's torch, as has been so much more, by Richardson and Cornelius Hauck, co-founders of the Museum. I'm proud to be a member of the Colorado Railroad Historical Foundation. Have you joined yet?

The first season of the Durango-Silverton Narrow Gauge Railroad is now over, with mixed reviews. Plaudits for the new lettering and removal of the diamond stacks, plus the K-36's now operating up the branch. On the negative side there have been a few glitches, but nothing atypical of any new operation. Hope to report more later.

Well, the winter winds are coming. Time for a new season of modeling. The very best of holiday seasons to you all; may they be a time of warmth and wonder. Do write – if the mood strikes.

Charlie

EMPIRE CITY RAILWAY
(THE PROTOTYPE)

by Rick Mugele

One of the drawbacks of modeling in On30 or HOn30 is the lack of prototype railroads in 30-inch gauge. In this article I want to introduce you to an outstanding prototype 30-inch gauge railroad which I hope will serve as an inspiration for building your own 30-inch gauge empire.

Tuolumne County, California, was the home of the fabled three-foot gauge West Side Lumber Company, and the standard gauge Sierra Railway and Pickering Lumber Company. Tuolumne County was also the home of the 30-inch Empire City Railway. The story of the Empire City Railway starts with the Yosemite Short Line which was the first 30-inch railroad planned in Tuolumne County. The YSL only built eight miles of track and never actually hauled any revenue freight before it was abandoned. The only known photograph of the Yosemite Short Line appears in the book, *West Side,* by Mallory Hope Ferrell (Pacific Fast Mail, 1979). The photo on page 74 of Ferrell's book shows the YSL mainline along the cliffs above Sullivan Creek but is captioned as being the West Side in Tuolumne Canyon. When the YSL folded in 1906, its rolling stock and construction crews were moved east into the mountains to work on the new Empire City Railway which was also 30-inch gauge.

The Empire City Railway was built by the Standard Lumber Company to improve the transportation of rough lumber from its mountain mills to the finishing plants in Sonora, California. This job had been done by wagons since the days when S. S. Bradford established sawmills at Browne's Meadow and Cold Springs. Bradford later sold his operations to the Standard Lumber Company. The Standard Lumber Company pushed its Sugar Pine Railway as far as Middlecamp, serving a mill there, and then on to Tramway where a 36-inch gauge incline and railway reached the South Fork mill. This 36-inch gauge line is sometimes confused with the 30-inch gauge Empire City Railway. Little is known about the South Fork operation other than that a pair of Porter tank engines were used on the line. I would like to hear from anyone who has information on the operations around South Fork.

Construction on the Empire City Railway started near Stoddard Springs. The line was built along the ridge dividing the Stanislaus and Tuolumne River drainages. Inclines were dropped down to Browne's Meadow (Empire City) and Lyons reservoir where connection was made with the advancing Sugar Pine Railway. At this time the Standard Lumber Company was a model railroader's dream. The Standard Lumber Company was using railroads of both 30 and 36-inch gauge to serve its mountain sawmills. These narrow gauge lines shipped out the rough lumber to the standard gauge Sugar Pine Railway. The Sugar Pine Railway took the lumber to Sonora using the tracks of the Sierra Railway for part of the trip. The facilities at Sonora included a planing mill, a box factory, and sash and door works.

The Empire City Railway is reported to have had four locomotives and 70 cars. Two of the locomotives were the YSL Porter tank engines; there were also two Shays. The rolling stock was mostly Russell type skeleton log cars and YSL flat cars.

The Empire City operation lasted until 1913. At this time the Standard Lumber Company opened a new mill at Standard, California. The Empire City and a large amount of timber were lost in a fire and eventually all the mountain mills were closed and the Sonora finishing plants were shut down. All the milling and finishing operations were moved to Standard. The Empire City Railway equipment went to a logging operation at Sloat in the Feather River Canyon of California. One of the Shays went to a logging outfit in the Santa Cruz Mountains.

There is still a lot of research to be done on the history of the Empire City Railway. I am working on a book on the Standard Lumber Company and the various railroads in the area. If you can help please write me c/o Box 402, Tuolumne City, CA 95379. I would like to thank Louisiana Pacific, Westside and Cherry Valley Ry., Ted Wurm, Al Rose, Mike Kern, and Al Nickel for help in the preparation of this article.

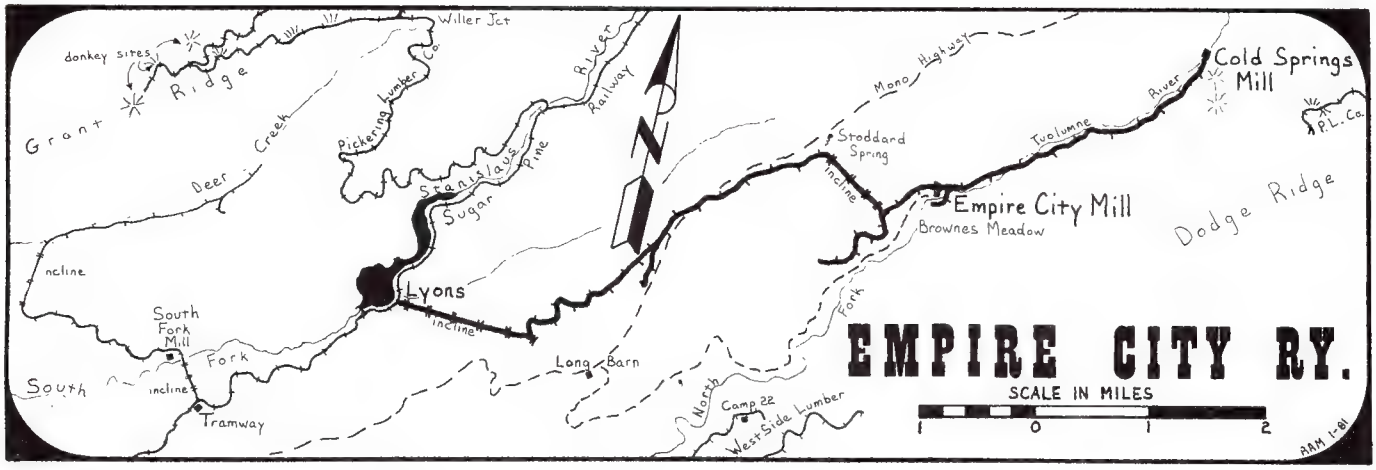
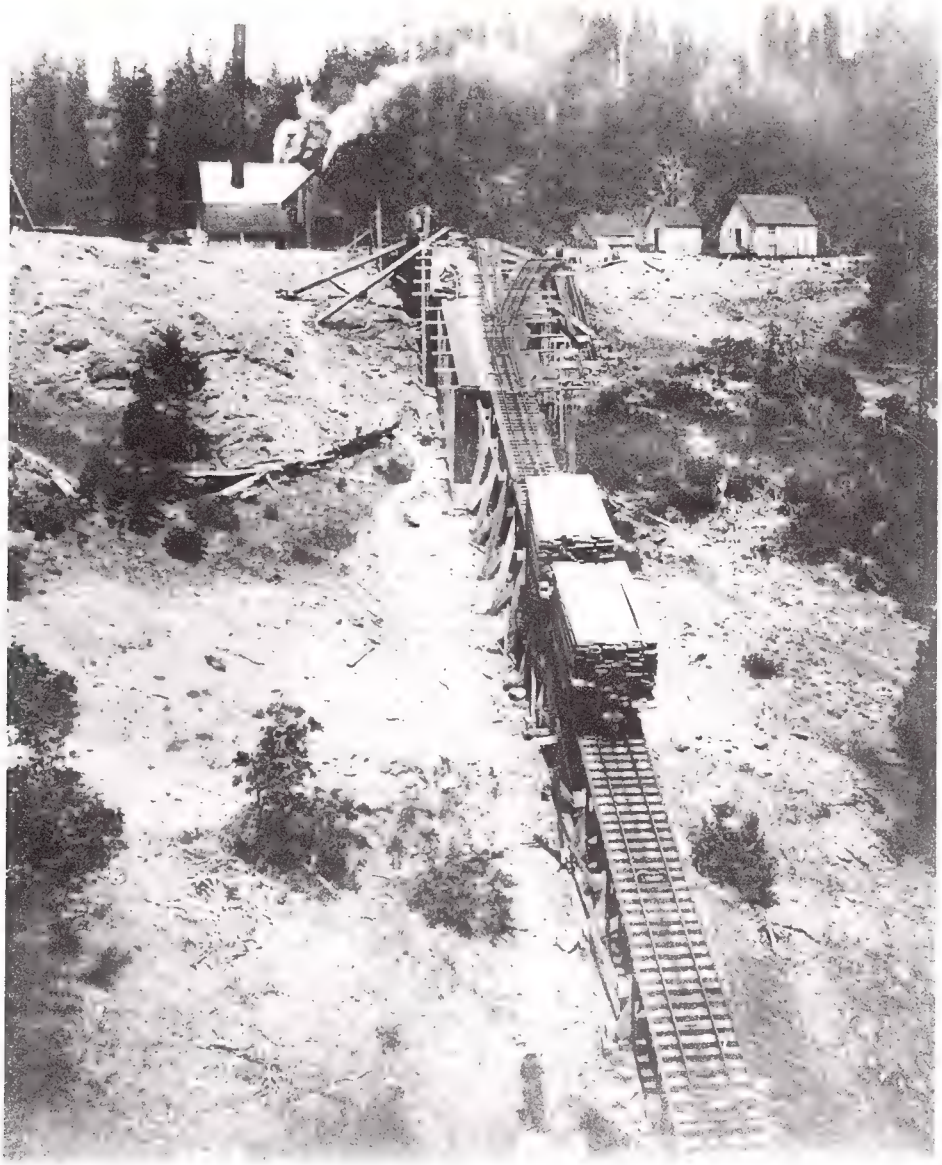


Photo opposite: The Cold Springs mill where Lumber is being loaded onto the Empire City Railway from the greenchain to the right of the mill. *Photo, collection of Louisiana Pacific.*



Left: The Empire Hoist and incline which ran from Brownes Meadow to the top of the ridge near Stoddard Spring. *Photo, collection of Louisiana Pacific.*

Opposite top: Yosemite Short Line #2 with a pair of skeleton log cars. *Photo, collection of Richard W. Biermann, courtesy of Ted Wurm.*

Opposite bottom: Log loading near the Empire mill in 1908. *Photo, collection of Richard W. Biermann, courtesy of Ted Wurm.*

Below: Yosemite Short Line equipment at Empire City about 1908. *Photo, collection of Richard W. Bierman, courtesy of Ted Wurm.*

The Cold Springs Mill appears to straddle the North Fork of the Tuolumne River. Logs were brought in by skid roads. The lumber was shipped out on the Empire City Railway. *Photo, collection of Louisiana Pacific.*

EMPIRE CITY RAILWAY
(A PLAN FOR A MODEL)

by Rick Mugele

This plan depicts the Empire City Railway in miniature. Since prototype plans of mills and trackage of the Empire City line have not been found, much of the model plan is based on archeology and old photographs.

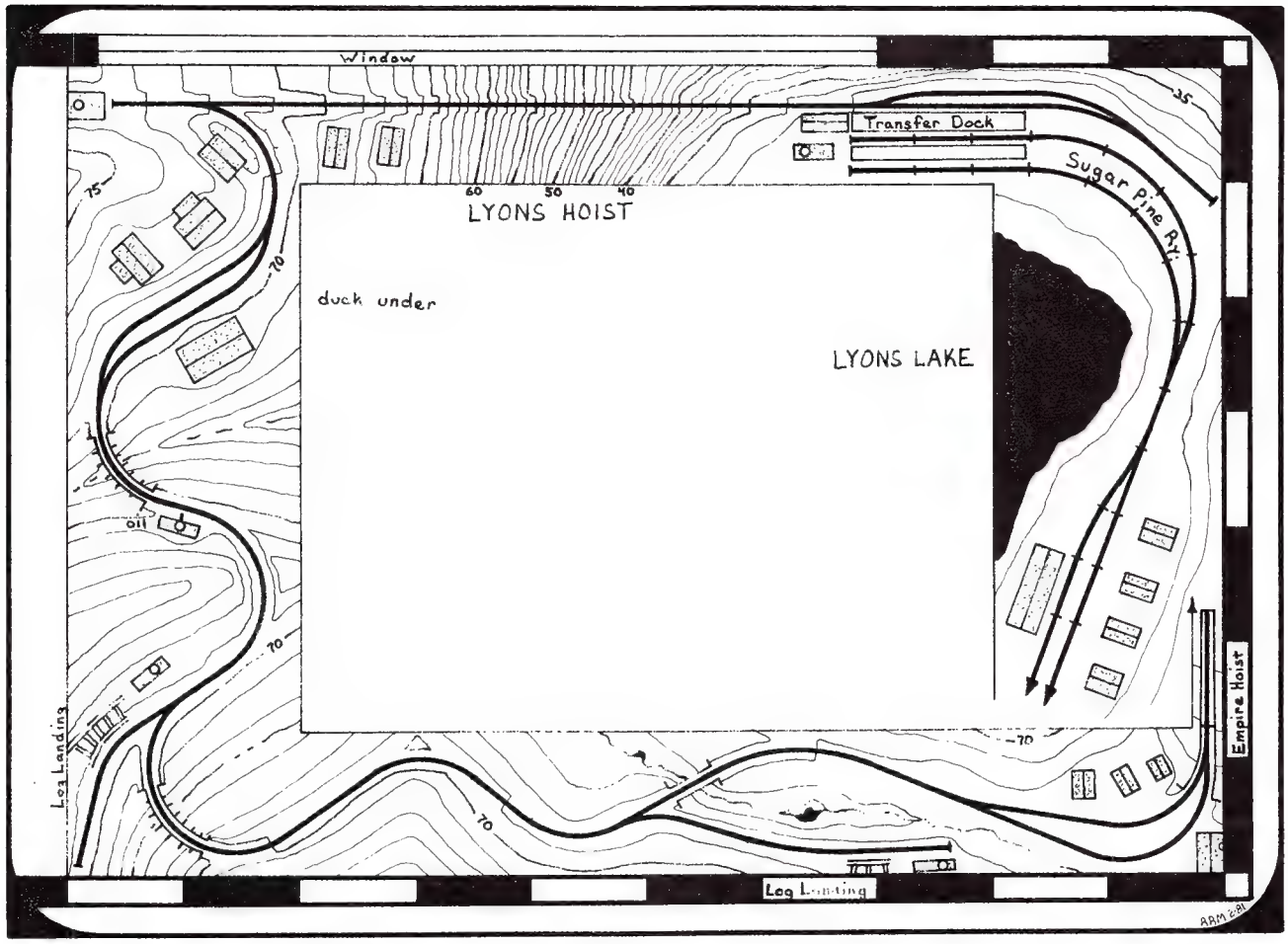
My plan is for an HOn30 layout in a 7×10 foot area. The inclines on the Empire City make it easy to design the railroad on several levels. Inclines also serve to delay travel and thus make the railroad seem longer. The Lyons Hoist is depicted much as it really existed. The lumber transfer at Lyons Lake was simple. Each narrow gauge car held a bundle of lumber which slid off the car as a unit onto the transfer dock. Two units were pulled onto each standard gauge car. A donkey engine was mounted at the end of a second dock. A line running from the donkey through a movable block pulled the lumber units off the narrow gauge cars, across the transfer dock, and onto the standard gauge cars. Empty cars were hauled back up the incline and let down through a switch at the head of the incline. The cars were made up into trains and taken to the Empire Hoist.

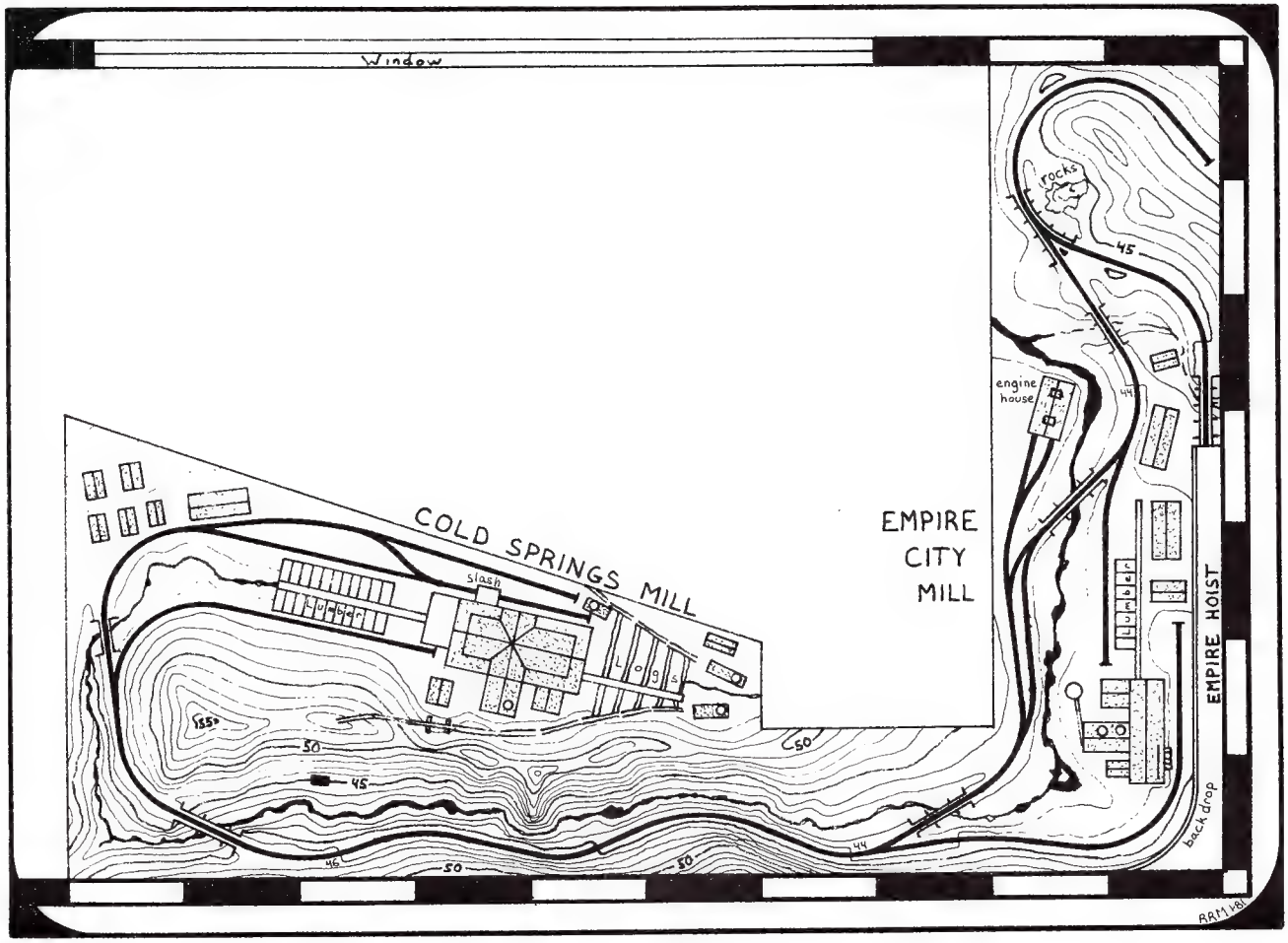
While the Empire City did not use block cars to operate the inclines, the Lyons Hoist was laid out so that a block car could be used. A block car is a simple flat car with the hoist cable attached to one end and a coupler on the other. It saves the trouble of having to connect and disconnect the hoist cable. The Empire City did not use automatic couplers. However, the use of a block car and automatic couplers would make operation of a model Empire City a lot easier.

The plan for the model Empire Hoist is a radical compromise with the prototype. The bulk of the incline is designed to be hidden behind a backdrop, so the easiest thing to do would be to build a platform hoist that would carry the trains up and down. The platform would be long enough to carry several cars and a locomotive to keep the cars from rolling off. The Empire Hoist would take loaded log cars and empty lumber cars down to Empire City. The Empire City had a fleet of Russell pattern log cars which were used for both logs and lumber so that empty cars returning from Lyons may have been used to take logs off Mono Ridge down to the mill.

The Empire City/Cold Springs level is located between the Lyons Lake level and the Mono Ridge level. The features are all selectively compressed from the prototype features noted in old photos or on field trips. Both the Empire City and Cold Springs Mills were located in meadows along the North Fork of the Tuolumne River. These meadow areas are part of a series of meadows connected by rugged canyons – wonderful scenery. The meadow areas are like parks with well formed pine trees and interesting granite outcroppings scattered around on open ground. The model plan depicts the mill areas and a canyon connecting them. The Empire Mill received logs by rail. Some cutting areas appear to have been very close to the mill requiring only a very short rail haul. The Cold Springs Mill used log skid trails to get timber. All green lumber went to Empire City for drying and then to Sonora over the Empire City Railway and Sugar Pine Railway.

While it is unlikely that anyone will build a model Empire City Railway exactly as I have drawn it, I believe the plan conveys the atmosphere and spirit of the prototype along with some details of how things were back in the days when the Standard Lumber Company ran three different gauges of railway.


Window
Transfer Dock
Sugar Pine R.R.
LYONS HOIST
duck under
LYONS LAKE
Log Landing
Empire Hoist
Log Landing
ARM 2-81


Window
rocks
engine house
COLD SPRINGS MILL
slash
EMPIRE CITY MILL
EMPIRE HOIST
back drop
ARM 1-81

On The Way to Colorado Back in 1939 Part 2

by Ted Wurm

A chapter from a book in preparation on a 1939 railfan tour by car from California to Colorado and back.

In Part 1 Ted described his trip to Colorado as far as Ely, Nevada. He discussed the railroads around Stockton, California as well as the Amador Central, Diamond and Caldor, Mich/Cal Lumber Company and some of the abandoned narrow gauge lines in Nevada.

On eastward from Austin City, Highway 50 soon brought us to the area of Ely, Nevada, which was then a beehive of steam railroading. Short line and industrial operations were on a grand scale. We were still about ten miles away from Ely when we noticed a road branching off southward to Ruth. At the same moment there appeared great billows of coal smoke coming from the east. We climbed a little hill at the junction and got our cameras ready just in time to photograph Nevada Consolidated Copper Company locomotive #90, a heavy Consolidation rolling a drag of 30 empty gondolas and a four-wheeled yellow crummy, bound for the copper mining pit at Ruth. We soon observed that such trains as this were running every few minutes, day and night, between Ely and Ruth, and Ely and the smelter at McGill. Motive power consisted of nine 2-8-0's of the NCC and Nevada Northern's numbers 80 and 81, and they really moved the ore from mine to smelter.

We followed the train of empties to Ruth, where we snapped photos of NCC 0-6-0T #337 and 0-6-0 #600. By the time we finished shooting equipment and watching the tremendous activity in awe, it was almost dark and we had to knock it off for the day. But it seemed a shame to have to stop when so much was going on and there were so many new items to photograph.

Our first point of call the next morning was at East Ely, location of the NCC and Nevada Northern enginehouse, shops, car storage yards, and headquarters. Here is where all Nevada Northern and Nevada Consolidated Copper road equipment was serviced and stored. The mine pit engines were kept mainly in the open at Ruth and there was another batch of motive power at the McGill smelter. NN locomotive #40, 4-6-0, was preparing to leave with passenger train #3 for the 122-mile run north to Cobre. As with other locomotives seen here from both companies, the #40 was well shined and polished and she additionally had the name "R. E. Noble" painted on the cab. We were told by the master mechanic that this 1912 Baldwin

Twenty loads of ore and a four-wheel crummy follow Nevada Consolidation Copper 2-8-0 on the high line above Ely, Nevada in 1909. The train is *en route* from the pit at Ruth to the smelter at McGill, Nevada. Study this early mining town for modeling ideas. Notice the little corner bar at the right center of the picture. The mixture of old wooden shacks and newer brick building is also typical as this little town moved into the 20th century. *Photo from Nevada Historical Society, courtesy of fTed Wurm.*

product had just completed 277,000 miles before having her wheels dropped and tires changed. One of NN's two Consolidations, #81, was lined up with engine #20 in perfect position for photos. NCC numbers 93 and 98 were also available and we shot them and some of the delectable Nevada Northern passenger cars, of which there were always an abundance spotted around at East Ely in the late 1930's.

We were soon back at Ruth for a look at the massive open-pit mine, which was claimed by the company to be largest in the world. It looked about a half-mile deep and more than a mile across, circled with tracks somewhat like a spiral staircase. It was literally alive with puffing locomotives and steam shovels, loading, climbing the spirals, emptying, going back down. Most of the locomotives were heavy saddle tankers, 0-6-0's and 0-6-2's. Operations proceeded in true railroad fashion, featuring block signals, tower, air brakes, shrill whistles sounding almost continuously like some big city terminal. We could have enjoyed this place for at least a couple of days, snapping shots of the engines as they surfaced, but there wasn't enough time.

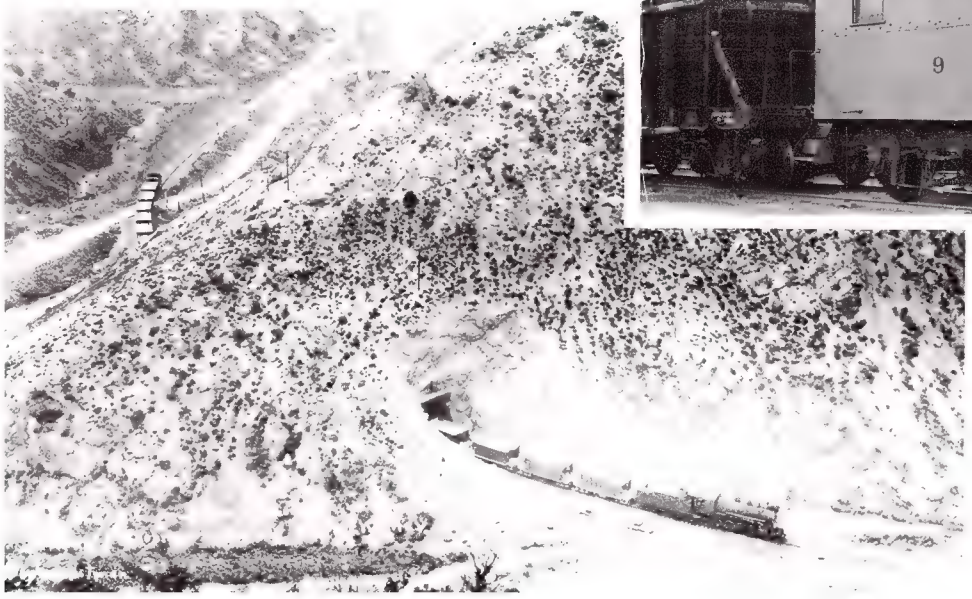
Our last stop in Nevada was at McGill, a few miles northeast of Ely, where the copper company's smelter is located. On entering the plant we noticed an engine shed to the left and were able to shoot 0-6-0 #6. We were startled to find nearby perhaps the most unusual locomotive of our trip – NCC #309, a Porter 0-4-0T only six and one-half feet high, with neither stack nor any other feature protruding from the top. She was used to propel cars under blast furnaces with very low clearance. The smelter was a vast complex with rail lines running in all directions, most of them busy, and we were unable to move into places for pictures we'd have liked. Again, a couple of day's stay would have been enjoyable and productive, but it would have to be another year.

Ted will be sharing more of his early railfanning experiences in future issues.

Number 501 in 1939 resting at the top of the open pit mine near Ruth, Nevada before descending once again with empties. *Photo by Ted Wurm.*

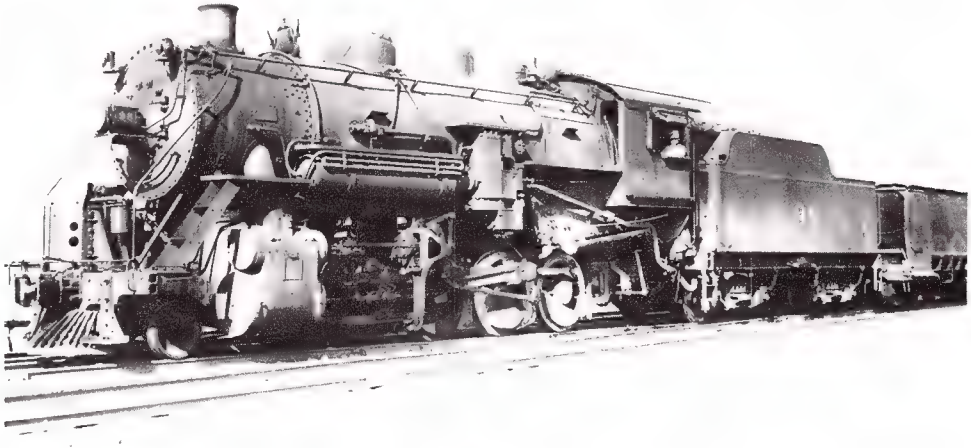
This heavy engine was used to haul loads out of the Liberty Pit at Ruth, Nevada. Number 501 was built by Baldwin in 1917 and weighed 162,000 pounds. The photograph was taken in 1920. *Photo, Nevada Historical Society, courtesy Ted Wurm.*

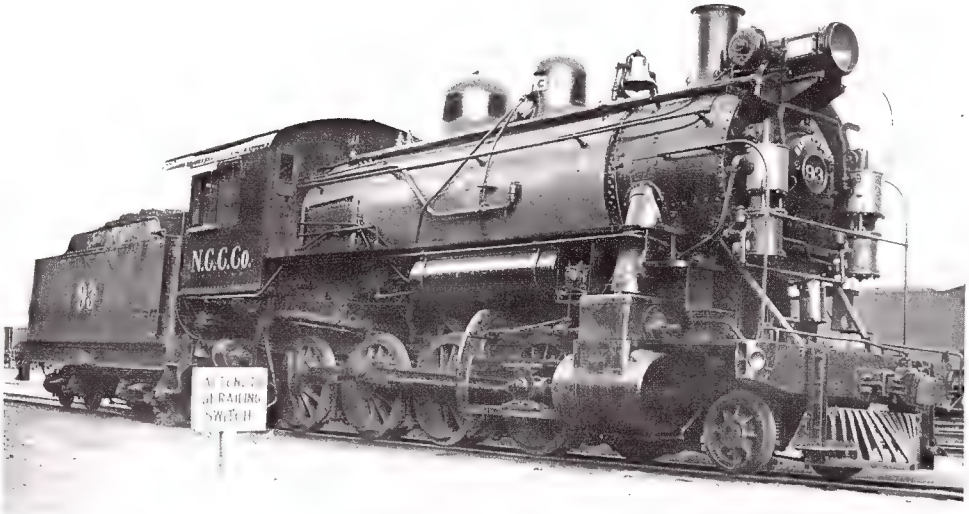
Nevada Consolidated Copper four wheel caboose #9 at Ruth, Nevada in 1939. She was painted yellow. *Photo by Ted Wurm.*



Nevada Consolidation Copper 2-8-0 with an ore train en route from Ruth to McGill at the lower tunnel in Robinson Canyon near Ely, Nevada in 1909. Notice that both the front and the rear of the train are sticking out of the tunnel. *Photo, Nevada Historical Society, courtesy Ted Wurm.*

One of Nevada Consolidated Copper's newest engines. She was built by Alco-Schenectady in 1929. This photograph was taken in East Ely in 1939. *Photo by Ted Wurm.*

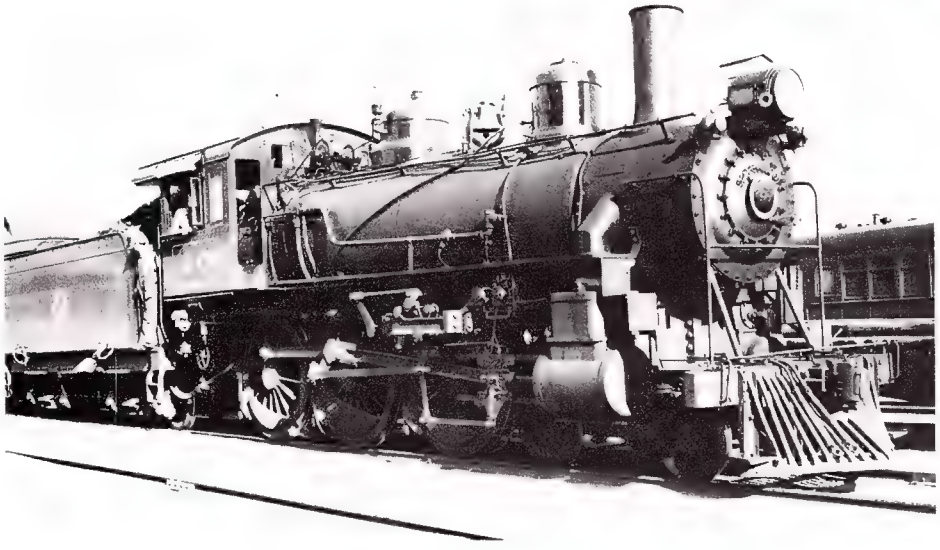




Nevada Consolidated Copper #93 at East Ely in 1939. *Photo by Ted Wurm.*

Nevada Consolidated Copper #82 at Ruth, Nevada in 1939. *Photo by Ted Wurm.*

Nevada Consolidated Copper Liberty Pit near Ruth, Nevada in 1909. *Photo, Nevada Historical Society, courtesy Ted Wurm.*



This Nevada Northern locomotive was snapped at the East Ely shops in 1939 just before backing the train down to the Ely station. The name, R. E. Noble, is on the cab. Number 40 was built by Baldwin in 1910. *Photo by Ted Wurm.*

Switcher #600 at the rim of the pit at Ruth in 1939. She was former Nevada Northern #4 and was built by Schenectady in 1902. *Photo by Ted Wurm.*

THE AREA AROUND FORKS CREEK

by Malcolm Furlow
Photos by the author

When the **GAZETTE** began publishing Harry Brunk's beautiful articles about the Colorado & Southern Narrow Gauge Line through Clear Creek Canyon, that picturesque slim gauge began to catch the fancy of many modelers, including myself. I contemplated incorporating a "Forks Creek" into my Denver and Rio Chama Western. Actually, I did not have a place where I could depict a forking creek but I had a problem spot with a diverging track arrangement. This area had been left in a roughed-in-state for over a year while I studied different scenic arrangements.

I studied how I could best utilize the area. I was intrigued by Clear Creek Canyon as it was in 1872. The track gangs of the Colorado Central (later the Colorado & Southern) backed by Union Pacific money had just completed this line up the greatest of Colorado's Canyons. And the ride up Clear Creek Canyon was wondrous indeed. Strayhorn in *To the Rockies & Beyond* expounded on the beauties of the canyon. "Steady we climb at the rate of 170 feet to the mile, ever-changing pictures of the rarest beauty breaking upon the vision. The frowning rocks grown more terribly sublime, the height increasing and the chasm at times narrowing until the eye can scarcely scale the summits from the car window."

By September 1, 1872 there was a wye track at Forks Creek and a building serving refreshments for travelers bound for Denver or Central City and a small depot, the Forks Creek Station. This structure seemed perfect for this problem area on my layout.

This spot had a track arrangement which necessitated a plunge through a scenic divider requiring a snowshed or a double tunnel. The snow shed would probably need more real estate than I had available. But making two tunnels side by side look prototypical was a big scenic problem. Happily the two tunnel design doesn't bother me too much but probably it didn't happen too often in real life.

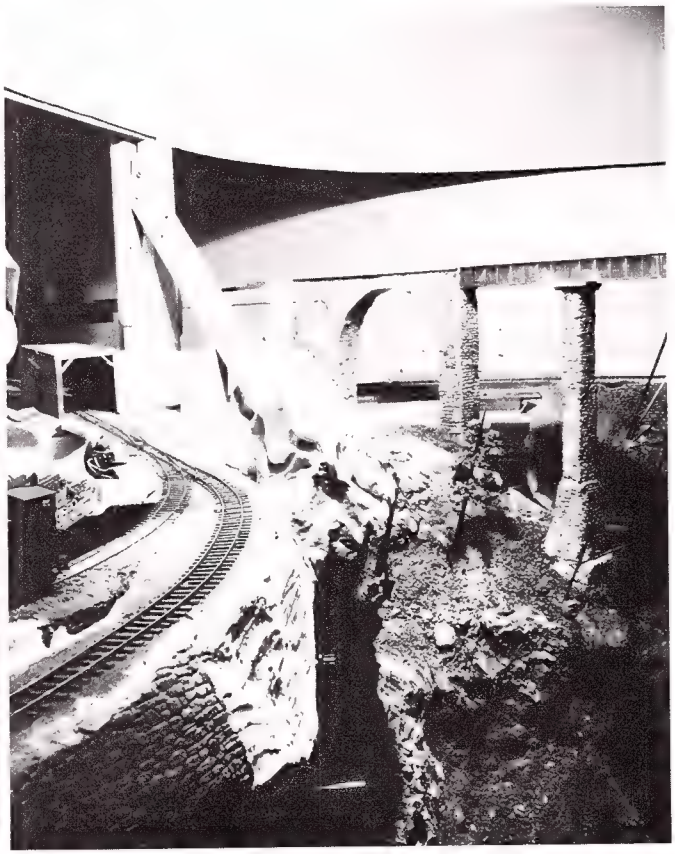
The diverging track arrangement also created a problem because I didn't want the turnout stuck inside a mountain creating a maintenance problem. If I had it to do over I would have moved the turnout down the mainline a little; but I'm not about to move it now.

An old wagon road skirts along the right-of-way for awhile, then crosses the canyon on a spindly looking bridge. The bridge design was taken from an article by Jack Work in *Bridges and Buildings* (Kalmbach, 1981). The bridge has a lot of charm and was not difficult to build. I had to combine two spans to achieve the required length. I left off some of the detail underneath because it is hard to see on my layout. I changed the decking to accomodate automobiles and trucks. Eventually the wagon road will swing

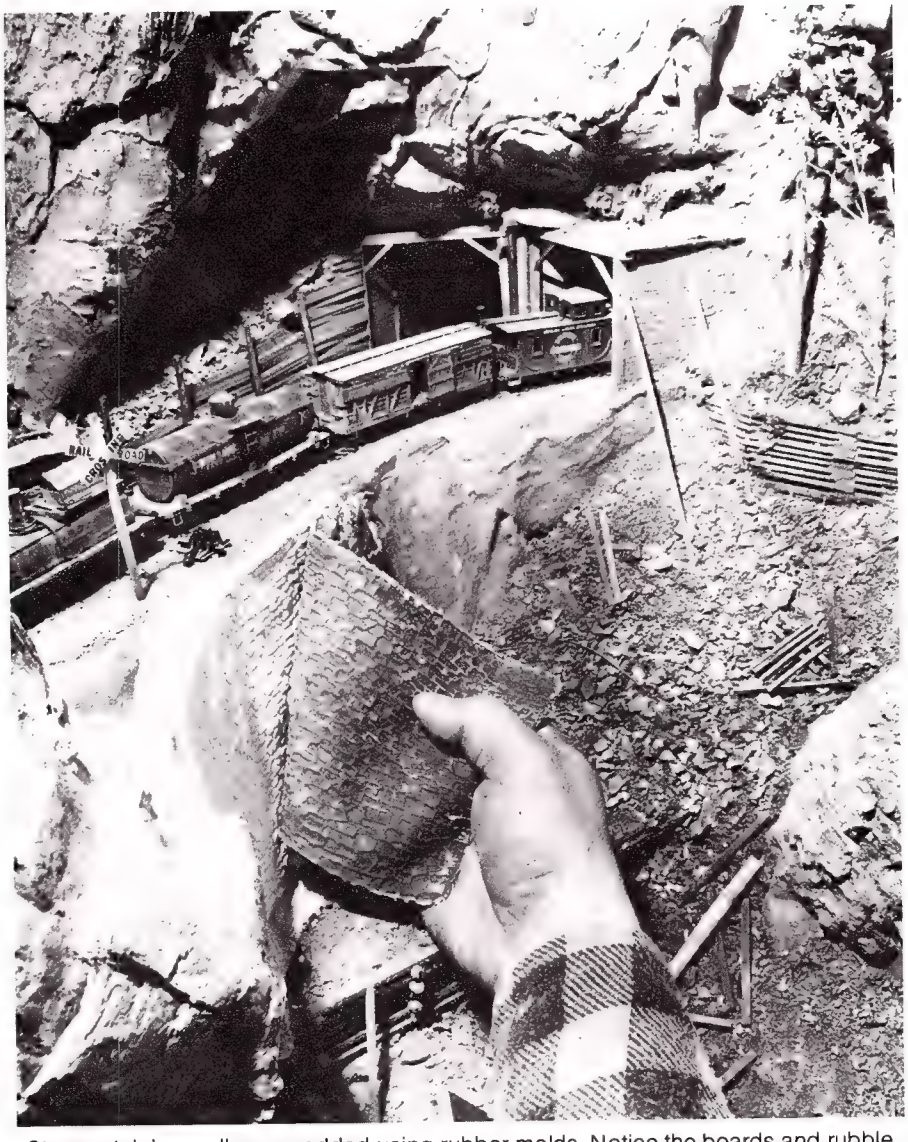
Opposite: The Forks Creek Station in place on the author's HOn3 Rio Chama and Western Railroad.

The depot base was constructed using stripwood. It was built in place on the layout. The card stock was used as a pattern.

The roughed in scene before finishing the scenery. The bridge was later changed to an arch type. The stone arch approach was left intact.



Shawn helping with the retaining walls. Much decomposed granite was used on this scene.



Stone retaining walls were added using rubber molds. Notice the boards and rubble lying everywhere.

under the arch bridge span to the right of Forks Creek Station and travel on around to the mine located under the high line.

My son, Shawn, helped with the building of some of the timber type retaining walls when the mainline was originally installed. As you can see in the photos, the backdrop was located fairly high above the benchwork. It was determined early during the planning stages that this scene would feature vertical scenery, extending eventually to the floor in one area.

After the Hydrocal base was in, along with the finished tunnels, rock castings were applied to the scenery portions reaching the backdrop. The area just below the mainline was left to be finished at a later date. When I finally determined the scenic arrangement, I resumed the scenery with more retaining walls, this time using the stone variety for contrast. A latex mold was made using a Volmer plastic stone embossed sheet for the master and the stone retaining wall castings were applied and their edges blended together to form one continuous wall supporting the track. A bridge abutment was built to the right and just under the big stone arch. This abutment was also cast in rubber molds and glued in place. After the bridge was finished, construction of the Structure Company, Forks Creek Depot kit was undertaken and completed in about a week of evenings. Before installing the little depot on the layout, a base was constructed using ribbed planking and 9×9 wood supports. Various scenic items were added, such as decomposed granite for ground clutter, along with various weeds, grasses and foliage. Rotted boards and posts were tossed under the bridge as well as on the support base for the depot to give a lived-in look to the scene.

At a future date a small water tank or water column will be installed to water the engines while at Forks Creek along with some telegraph poles and a few more figures to help bring the scene to life. The Forks Creek area on the Rio Chama presented a formidable challenge scenically, mainly because of space restrictions.

Forks Creek has officially been entered into my Rio Chama timetable, and those old diamond stacks look pretty good puffing up to the little depot.

Opposite: The Scenic problems are solved. The train is emerging from one branch of the double tunnel. The depot was placed on a platform behind the large rock outcropping.

REALISTICALLY SPEAKING

Making the Most of Small Places, Part 1

by Gary Nash

Photos by the author

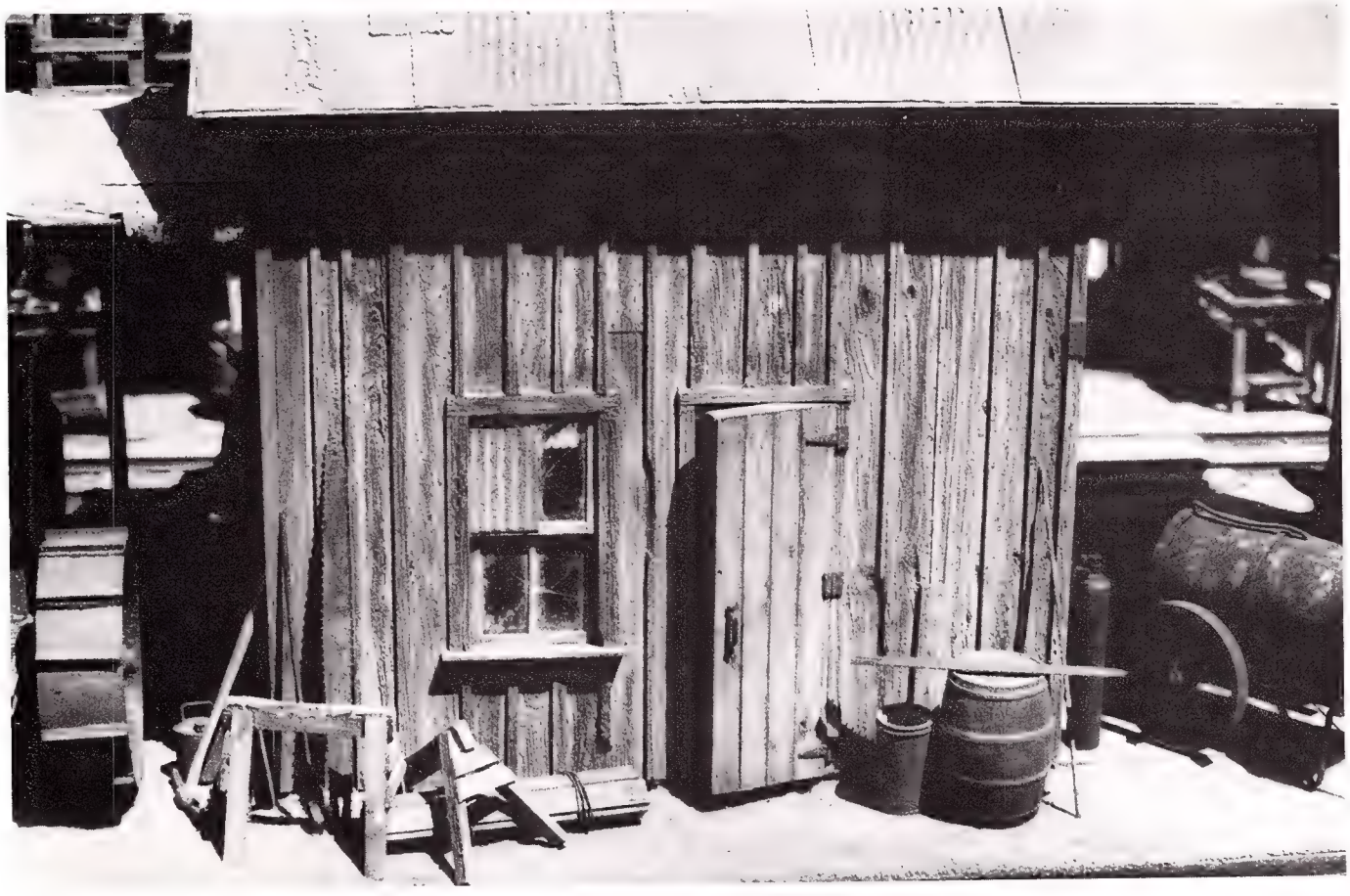
The display described in this article was built primarily to be shown at model railroad conventions. It is housed on a wood base that has an outer groove into which a 12-inch by 12-inch by 5-inch plexiglass cover fits. The display is comprised of a garage, track and three styles of work/tool sheds. It is entirely scratch-built and contains over 700 commercial castings. The ground cover and structures are fastened to the base but none of the vehicles are glued down. This facilitates photography. I can move them to change the composition or get them out of the way for extreme close-ups.

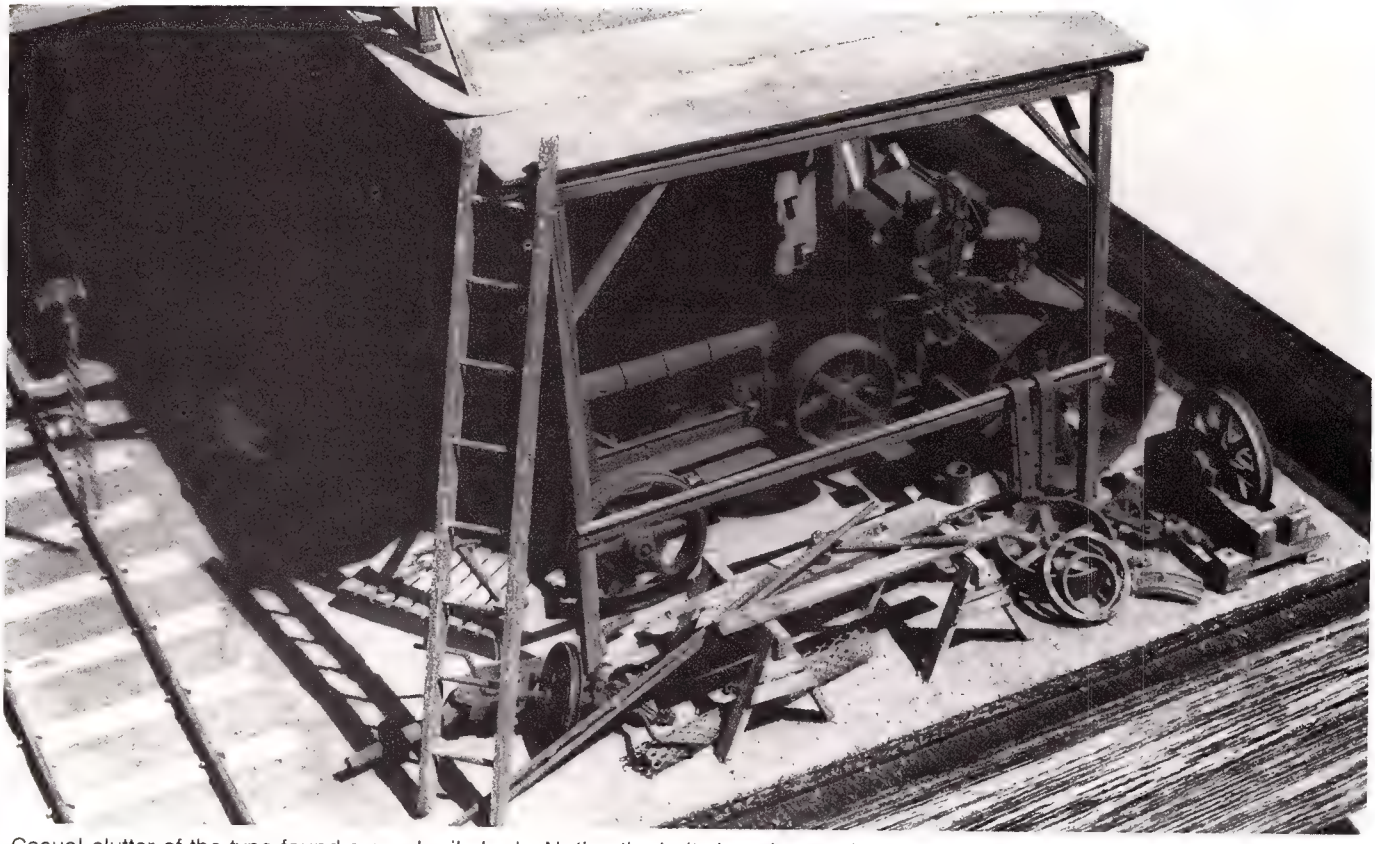
Once I had the basic idea of the types of structures and their approximate scale sizes and placements I determined the size of the wood base and the plexiglass cover. I drew a 12-inch by 12-inch square on a piece of illustration board representing the size of the wood base and used it for placement ideas of the structures and track. First I determined that right down the middle was the most sensible spot for the track with the work sheds facing in. After this the exact scale sizes of the building could be decided upon. Then I made cut-outs from illustration board of their width and length which I used to determine their proper placement in the finished display. Then construction began on the largest and most time consuming structure, the garage.

The front and back as well as the side walls were constructed of Kappler 2 by 4's. These pieces of wood were prepainted with Floquil Rosewood Stain, then Roof Brown. They were then cut to size and placed on scale templates which had scrap pieces of wood glued to the tops, sides and bottoms to hold the walls while they were being glued together. Once the walls were completed, Scale Model Weathering Co. black tarpapers were glued to the *outsides* of the walls with the black side *facing in.* This is not only prototypical on a building such as this but varies the appearance of the interior. The board and bat exterior is made up of Kappler 1 by 10's and 12's and HO 1 by 4's and 6's.

All these pieces were stained Floquil Driftwood and allowed to dry for a few days. They were all applied to the backside of the tarpapers (the outside walls) and then distressed with a potter's needle and

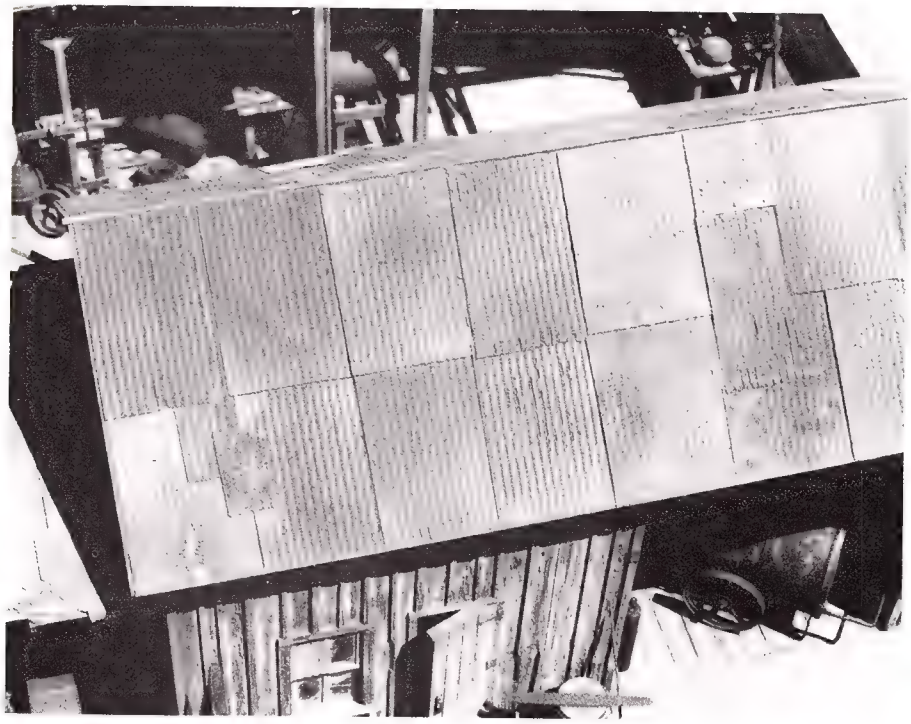
The textures necessary for realistic model building show clearly in this photograph. Notice the knot holes and varigation in texture on the siding of the wall. The window glass has dust and cobwebs and the scale size of each component seems to fit the scene.





Casual clutter of the type found around rail sheds. Notice the belts hanging on the beam. The ladder has texture, the ties are embedded in the dust and the tractor dozes in the shade. All of these touches of detail add to the overall effect of the small scene.

The roof of any building is always prominent. The techniques used to weather this roof will be described in the next installment of *Realistically Speaking.*



an X-Acto #11 blade to simulate cracks, splits, knotholes, etc. A combination of finely sifted dirt, straight Floquil dio-sol and Floquil natural pine stain were administered to the walls to create a weathered appearance. (This technique was described in my article in the Jan/Feb 1981 issue of the **GAZETTE**.) The windows were constructed a la Mic Greenberg's method in the Nov/Dec 1979 issue of the **GAZETTE** (out of print). A 2 by 4 stud wall separates the garage from the work room. After the floor boards were cut to approximate size they were glued to the original piece of illustration board representing the floor area of the garage used earlier in placing the structures. Once the boards were glued down and the edges trimmed and weathered the four finished walls were glued in place.

After the middle wall was in place, a piece of scribed wood and 2 by 4's were used to represent a beamed and planked ceiling. Since at least 90 percent of the roof interior would *not* be seen there was no reason to go board by board. A piece of appropriately sized scribed wood was painted, weathered and glued to a complete roof size piece of illustration board. It was then scribed down the center, folded over the two end wall peaks and glued in place.

In Part two I will describe the techniques used to create the rusted roof on the garage.

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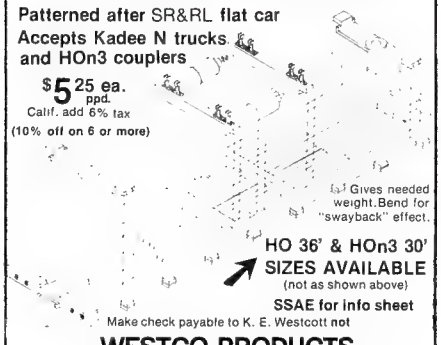

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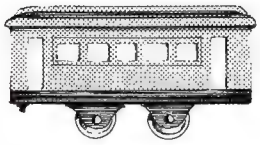

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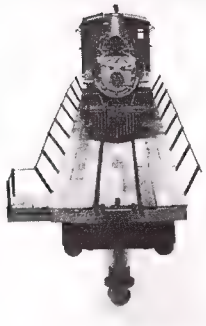

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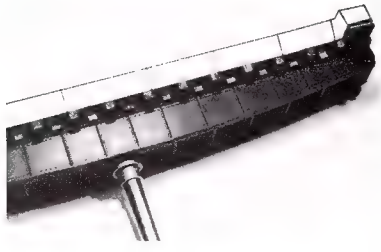

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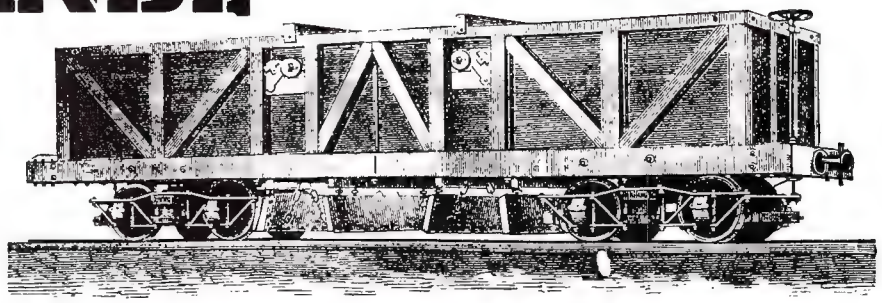
GONDOLA CARS OF THE DENVER & RIO GRANDE

Part 3: Classes 11, 12, 13, 14

by Robert E. Sloan



The End of Class 11

In 1921 the D&RG became the Denver and Rio Grande Western Railroad. The road was worn out and did not improve much at first. At this time it got the new nickname "Dangerous and Rapidly Growing Worse". In March 1922, the car inspector in the Superintendent of Motive Power Office in Alamosa inspected samples of his rolling stock. His 20-ton cars were 34 years old and had a depreciated book value of $82. All were in poor condition and needed major repairs to their trucks and bolsters. The type 11b and 11c gondolas needed new draft gear as well. Type 11a had cost $217 each, and $150 each was needed for repairs. Types 11b and 11c had cost $381 each and needed $284 each for repair. Type 11d had cost $306 each and $188 each was needed to repair them. However, this last class was in better shape than the others. Repair was clearly not worth it so the days of the 20-ton gondolas were numbered.

In 1924 there were 243 cars in classes 11a-c and nine in 11d. By early 1925 there were only 20 left, including all those in 11d. American Smelting and Refining in Pueblo, Colorado bought numbers 9022, 9113, 9150 and 9189 in August 1926. Gondola #9744 became coal work outfit car #09744 by 1923. The other nine class 11d cars numbered 9719, 9729, 9738, 9756, 9767, 9791, 9793, 9795, and 9939 lasted through 1940. Seven class 11b and 11c cars between numbers 9019 and 9185 lasted from 1938 to 1945, with four between numbers 9029 and 9184 lasting to 1950. All were gone in 1952. The last 11a was 08916 which was a work coal car in 1940. Other similar work cars in 1940 were 11c cars numbered 09104, 09160, and 09163.

Class 12

By 1898 about 200 gondolas had been worn out or sold so a new class 12 was in order. In August of that year the D&RG built 151 25-ton 32-foot gondolas numbered 9200 to 9350 (Class 12a). These were standard link and pin gondolas with the floor 2 feet 7.5 inches above the rail and with four board sides which were 4 feet 2 inches tall. They had a 14 inch board and three 12 inch boards but were much stouter than the 20-ton cars. For some reason the car shop decided that these sides, as high as the later five board high side gondolas, had sides too tall. In November they redrew the plans to show sides 10 inches lower. Two hundred twenty four of these lower sided cars were finally built in June 1902 as cars numbered 9351 to 9574 (class 12b). The two subclasses are otherwise identical. There were originally 475 cars in class 12. Cars in class 12a originally cost $246 and those in class 12b cost $246. This class is the first of five classes of the so-called high-side gondolas.

There was no question of applying automatic couplers to these cars in 1903 because they were so new. The coupler was simply poked through the end sill as in the 20-ton cars.

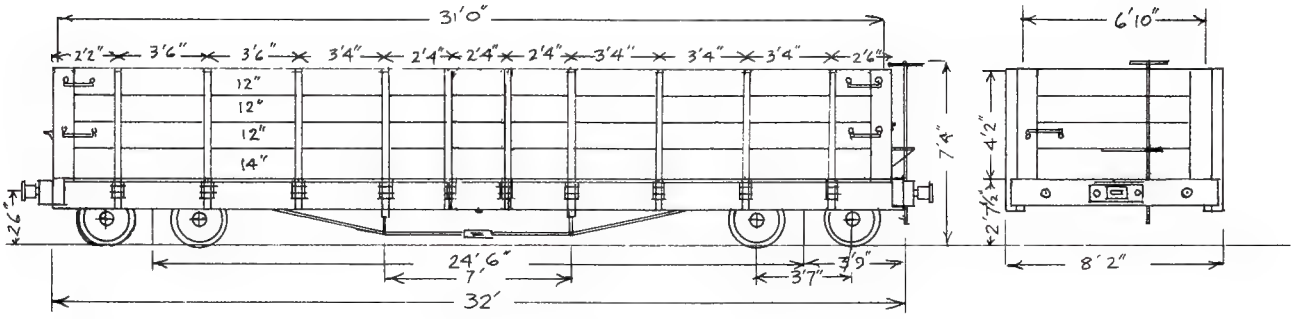
When the superintendent looked at these cars in 1922 he found both classes 12a and 12b in fair shape. Their book value was only $82 but they were clearly worth rebuilding. He decided that the bolsters needed reinforcement, and new draft gear was called for which raised the floor one foot. Stake pocket U bolts and steel buffers were needed and the sides had to be raised on 12b to the same height as 12a. At that time there were 130 class 12a cars and 198 class 12b cars left. The original wheelbase was 24 feet 6 inches; after rebuilding the wheelbase was 22 feet 4 inches. In 1939 there were still 315 of these cars left. By 1954 240 were still on hand but in 1958 only 47 were left and at the end of operations only 27 were still gondolas.

Classes 13 and 14

In July 1902, American Car and Foundry built 500 more 25-ton 32-foot cars numbered 1000 to 1499 and weighing 18,500 pounds. Class 13 cars were numbered from 1000 to 1249 and were ordinary gondolas. Class 14 had numbers from 1250 to 1499 and were built as side dump cars. They remained as this separate class until both class 13 and class 14 were rebuilt into high-side gondolas in 1923 and the classes were merged. Classes 13 and 14 were both built with sides 40 inches high. Their depreciated book value in 1922 was $225 each and the car superintendent recommended that the bolsters be reinforced, that roller side bearings be applied, that outside truss rods be replaced with through rods, and that the sides be raised to increase the cubic capacity so it would equal the deadweight capacity. He also suggested application of stake U-bolts. After the rebuilding the wheelbase was 22 feet 2 inches long. In 1922 454 cars were left, 333 made it to 1939, 337 survived to 1952, 111 were still around in 1963 and 91 survived to the end of operations in 1967. During the rebuilding of these classes most cars received the economy cast steel draft gear, but 46 did not. These cars retained the single pocket wooden draft gear they came with. They were numbers 1004, 1014, 1027, 1031, 1034, 1047, 1053, 1054, 1066, 1087, 1088, 1093, 1097, 1128, 1129, 1141, 1164, 1177, 1205, 1209, 1213, 1224, 1251, 1255, 1288, 1295, 1297, 1303, 1310, 1322, 1336, 1386, 1399, 1405, 1415, 1416, 1434, 1436, 1445, 1468, 1477, 1479, 1489, 1490, 1492, and 1496.

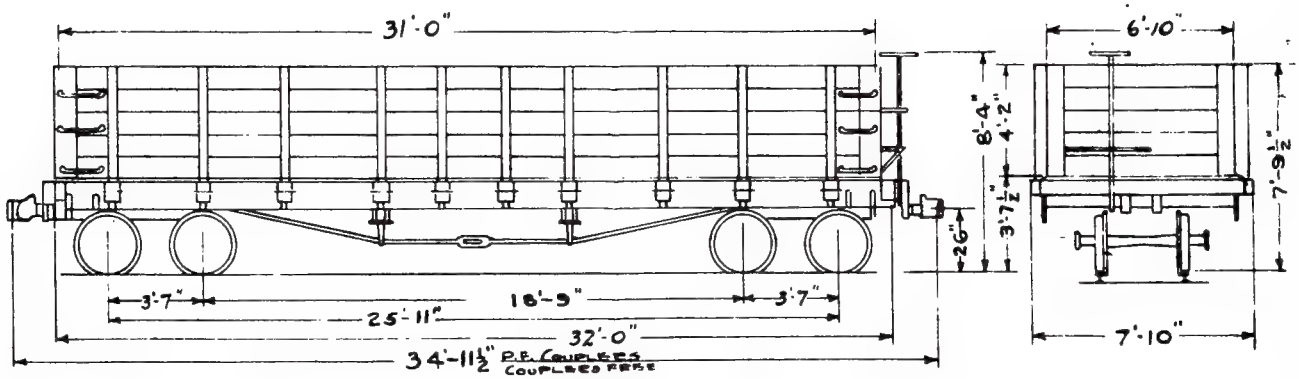
In the next issue Dr. Sloan will complete this series on the gondolas of the Denver and Rio Grande.

DENVER & RIO GRANDE
Narrow Gauge Coal Cars
Nos. 9200 to 9350 (incl.)
Class 12a



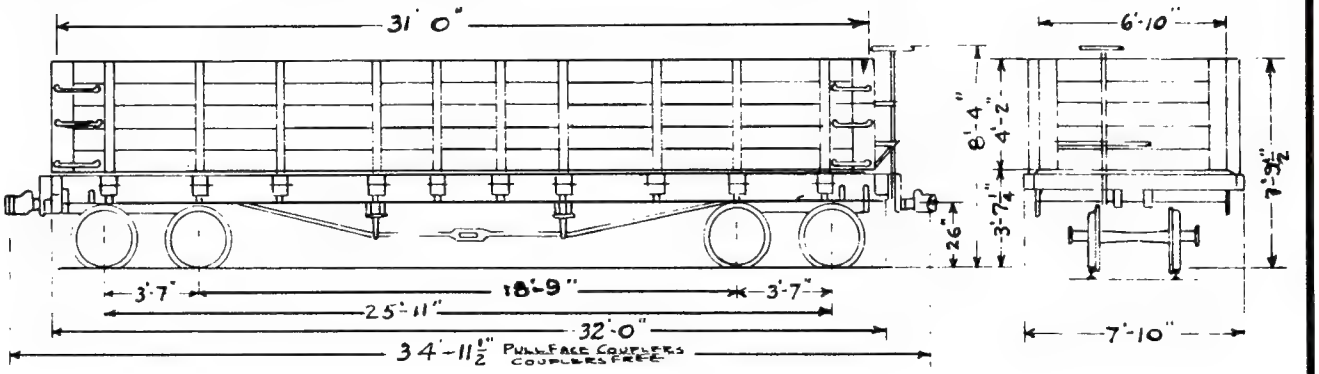
Length Inside — — 31'0"		Weight of Car Average: 19300
Width Inside — — 6'10"		Capacity of Car: — — — — 50000
Height overall — — 7'4"		Cubical Contents — — — — 883 Cu. Ft.
		Built D&RG June 1898

DENVER & RIO GRANDE WESTERN
Narrow Gauge Coal Cars 50,000 Capacity
Nos. 9200 to 9299
Class 12



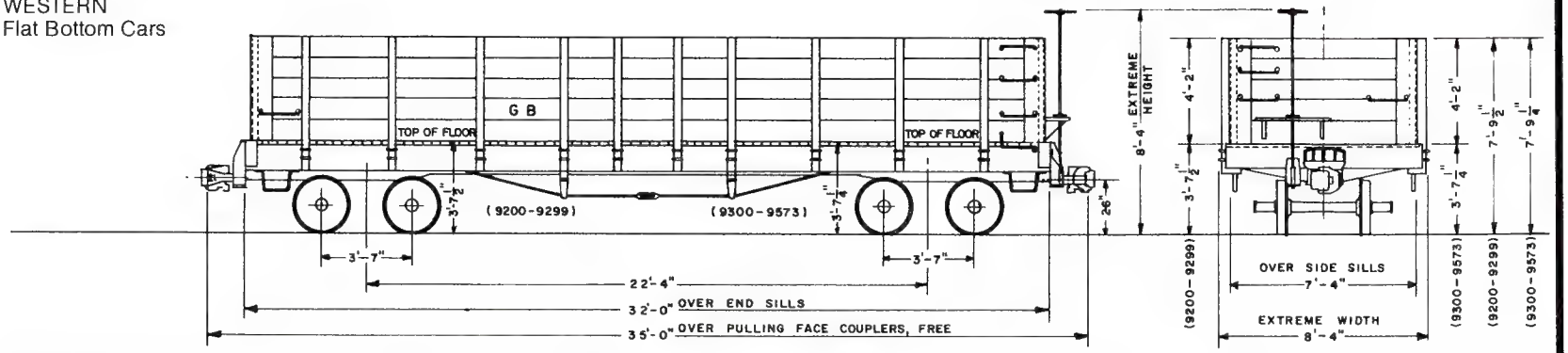
Gauge — — — — 3'-0"	Body Bolster CAST STEEL	Length inside — — 31'-0"	Light Wt. of Car — 21500
Truck - Type - Diamond Arch Bar	Brake Beams — — Rail	Width " — — 6'-10"	Cubical Capy { HEAPED 1010 CU.FT. LEVEL 882 cu.ft.
Journals — — — — 4"x7"	Brakes — — West. Autom.	Depth " — — 4'-2"	Builders — — — P.&R.G.
• Box & Lid — — — Mall.	Coupler — — — Tower		Date Built — — Aug. 1898
	Draft Rigg. CARDWELL 6-3		

DENVER & RIO GRANDE WESTERN
Narrow Gauge Coal Cars 50,000 Capacity
Nos. 9300 to 9574
Class 12



Gauge ___ 3'-0"	Body Bolster CAST STEEL	Length inside ___ 31'-0"	Light Wt. of Car 21500#
Truck - Type ___ Diamond Arch Bar	Brake Beams ___ Rail	Width " ___ 6'-10"	Heaped 1010 cu ft
Journals ___ 4"x7"	Brakes ___ West. Autom.	Depth " ___ 4'-2"	Cubical Capy - ___ 882 cu ft
" Box & Lid ___ Mall.	Coupler ___ Tower	Draft Rigg. CARDWELL G-23	Builders ___ D.R.R.G.
			Date Built ___ June - 1902

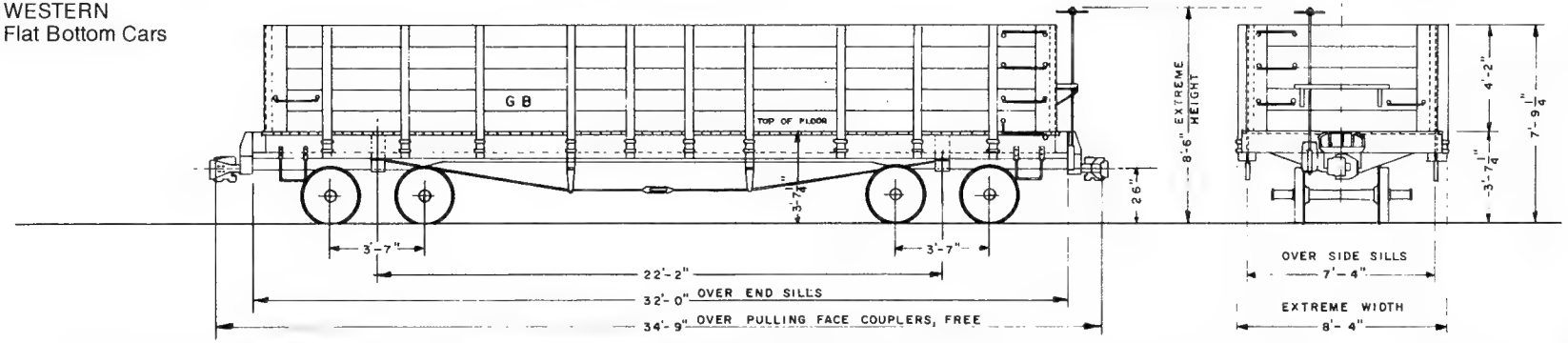
DENVER & RIO GRANDE WESTERN
Narrow Gauge Gondola & Flat Bottom Cars
Nos. 9200 to 9573
Class 12



DESCRIPTION

GAUGE ___ 3'-0"	SUPERSTRUCTURE ___ WOOD	MARKED CAPACITY, LBS. ___ 50,000
JOURNALS ___ 4" X 7"		LIGHT WEIGHT, LBS., AV. ___ 20,900
WHEELS ___ 26" CAST IRON		MAX. WEIGHT OF LADING, LBS., AV. ___ 55,000
TRUCK TYPE ___ ARCH BAR	UNDERFRAME - WOOD ___ CAST STEEL DRAFT ARMS	
TRUCK SIDES ___ MILD STEEL BAR - SEPARATE BOXES		CUBICAL CAPACITY (LEVEL) CU. FT. ___ 882
TRUCK BOLSTER ___ CAST STEEL		CUBICAL CAPACITY (HEAPED) CU. FT. ___ 1,010
SIDE BEARINGS ___ BARBER	DRAFT GEAR ___ CARDWELL G-23	
	COUPLER ___ TOWER - 9¼" HEAD	LENGTH INSIDE ___ 31'-0"
	BRAKE ___ KC 812	WIDTH INSIDE ___ 6'-10"
	HAND BRAKE ___ HORIZONTAL WHEEL	DEPTH INSIDE ___ 4'-2"
		YEAR BUILT (9200-9299) ___ 1898
		YEAR BUILT (9300-9573) ___ 1902
		BUILDERS ___ D & R G W

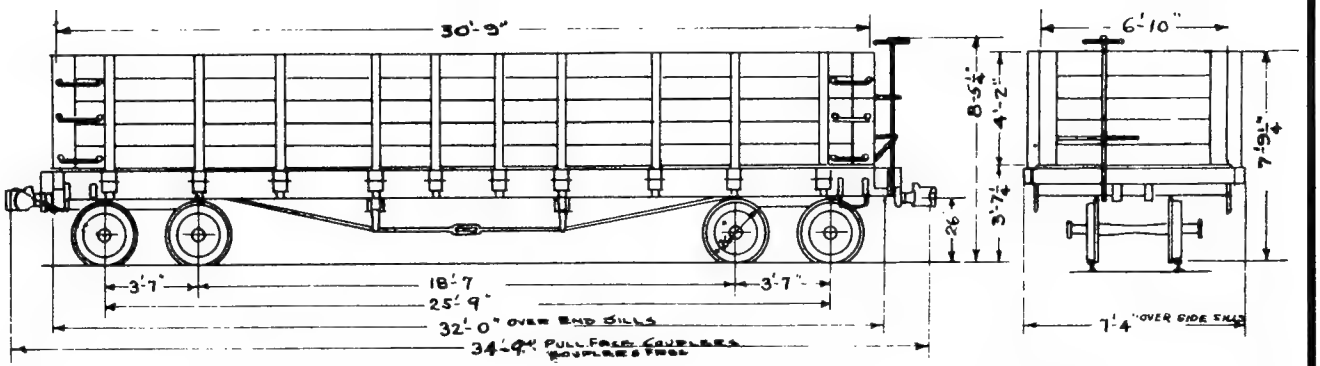
DENVER & RIO GRANDE WESTERN
Narrow Gauge Gondola & Flat Bottom Cars
Nos. 1000 to 1499
Class 13



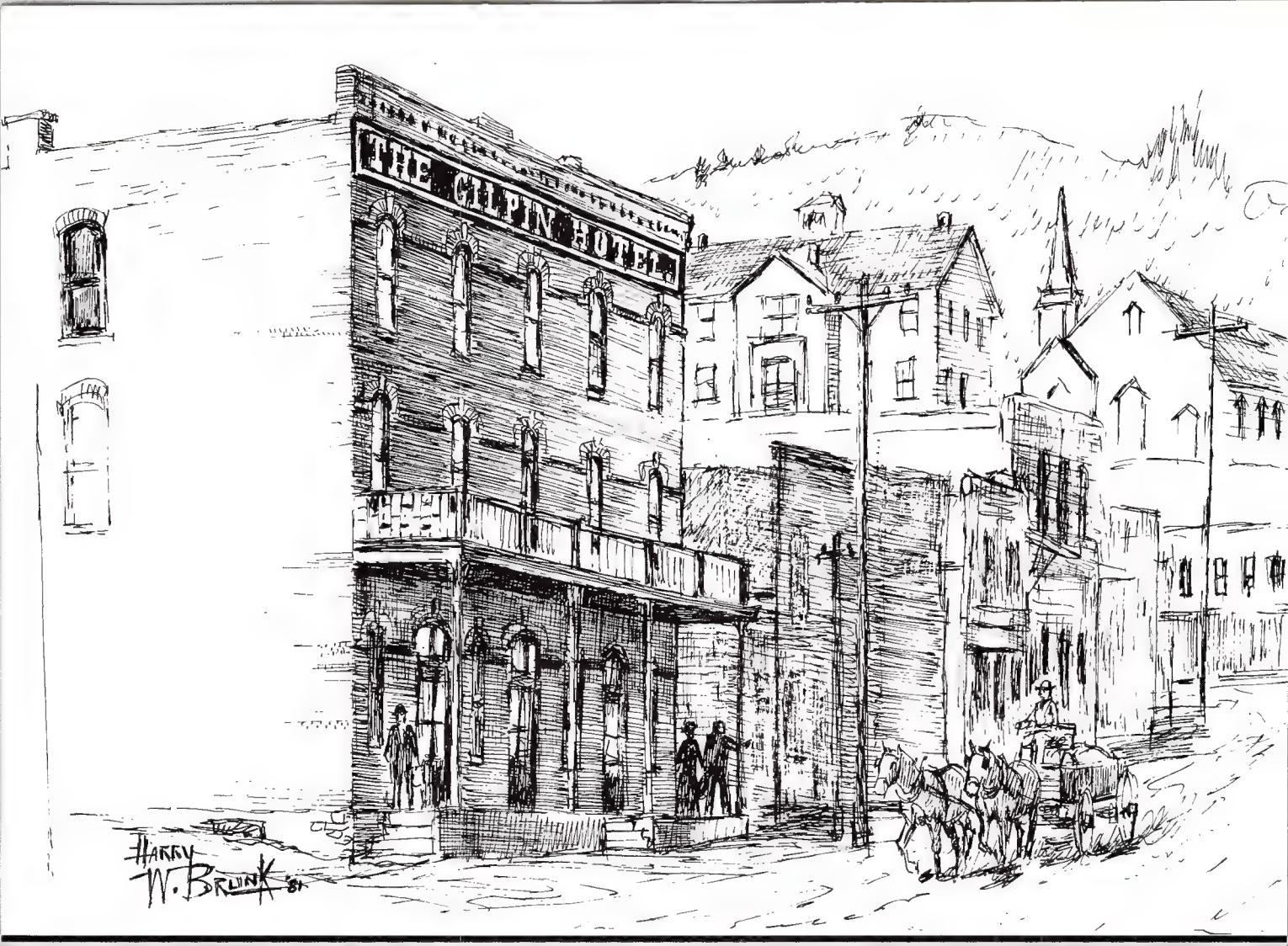
DESCRIPTION

GAUGE — 3'-0"	SUPERSTRUCTURE — WOOD	MARKED CAPACITY, LBS. — 50,000
JOURNALS — 4" X 7"		LIGHT WEIGHT, LBS., AV. — 22,000
WHEELS — 26" CAST IRON		MAX. WEIGHT OF LADING, LBS., AV. — 55,000
TRUCK TYPE — ARCH BAR	UNDERFRAME — WOOD — CAST STEEL DRAFT ARMS	
TRUCK SIDES — MILD STEEL BAR — SEPARATE BOXES		CUBICAL CAPACITY (LEVEL) CU. FT. — 875
TRUCK BOLSTER — CAST STEEL		CUBICAL CAPACITY (HEAPED) CU. FT. — 1,000
SIDE BEARINGS — BARBER	DRAFT GEAR — CARDWELL G-23	
	COUPLER — TOWER — 9¼" HEAD	LENGTH INSIDE — 30'-6"
	BRAKE — KC 812	WIDTH INSIDE — 6'-10"
	HAND BRAKE — HORIZONTAL WHEEL	DEPTH INSIDE — 4'-2"
		YEAR BUILT — 1902
		BUILDERS — AMERICAN CAR & FOUNDRY CO.

DENVER & RIO GRANDE WESTERN
Narrow Gauge Coal Cars 50,000 Capacity
Nos. 1000 to 1249 (incl.) & Nos. 1250 to 1499 (incl.)
Classes 13 & 14



SPECIALTIES				CAPACITY			
Gauge	3'-0"	Body Bolster	Plate with C.I. Fillers	Length inside	30'-9"	Light wt of Car	22400#
Truck Type	Diamond Arch Bar	Brake Beams	Rail	Width "	6'-10"	Marked Capy	50000
" Bolster	Am. St.	Brakes	West. Automatic	Depth "	4'-2"	Builders	A.C. & F
" End Casting	—	Schedule	—	Cubical Capy (Level)	875 cu ft	Date Built	July 1902
Journals	4X7"	Coupler	Tower	" " Heaped	1000 " "		
" Box and Lid	Mall.	Draft Rigging	Cardwell G-23				
			46 cars Miner Single Pocket				



Up Clear Creek on The Narrow Gauge

Part 12: The Gilpin Hotel

by Harry Brunk
Photos by the author

In my opinion, the Gilpin Hotel is certainly the "Queen of Black Hawk". For years when you rounded the bend in the highway and caught sight of this regal structure against the mountain side, you knew you were in a town of some importance.

Complete with its brick red face and white-on-black sign painted directly on the bricks across the top, the Gilpin Hotel stood as a symbol of once grand glory that rivaled even the best of the more glittering Central City just up the Gulch Road.

It was the first building of importance you saw as you entered town, and at first it looked misplaced, like a Hollywood set left behind when shooting was completed. Then you would see the other buildings of the town, and know the hotel was surely where it belonged. As the years have passed other buildings have been built closer to the highway bend, and the hotel has been repainted in white with a pink top. The sign is now in black letters but with the original lettering style. Somehow these changes have cost the hotel some of its eye and heart stopping appeal. The entrepreneur who last operated the hotel undoubtedly thought the new color scheme would be more attractive to business, but the original scheme seemed to fit the old building better.

New arrivals on the train didn't have to wonder long where the best hotel was located in Black Hawk because the Gilpin Hotel was situated overlooking the yard tracks and depot. Handy to both depot and the business district, no hotel could ever hope to be better located (see map in Part 11 for location).

Small as hotels go, the Gilpin fits right in with the "pocket sized" impression of Black Hawk. Yet it is obviously large enough to serve new arrivals and traveling trade people well. It's fitting that this should

Title illustration: Business as usual in and around the Gilpin Hotel in the early 1900's. The Gilpin was named after Gilpin County.

be the last building I'll describe in Black Hawk before moving on down the railroad.

Building a model of the Gilpin presents plenty of challenge. The windows and doors are not commercially available at this time, so I made masters and cast them in clear epoxy for the UC&N Gilpin Hotel, glass and all. This technique was first used on my Black Hawk depot. The slightly dusty appearance the window "glass" has up close wouldn't appeal to some, and interior detail hounds wouldn't like it at all, but to me it gives the structure a lived-in and used appearance separating it from a strictly architectural model.

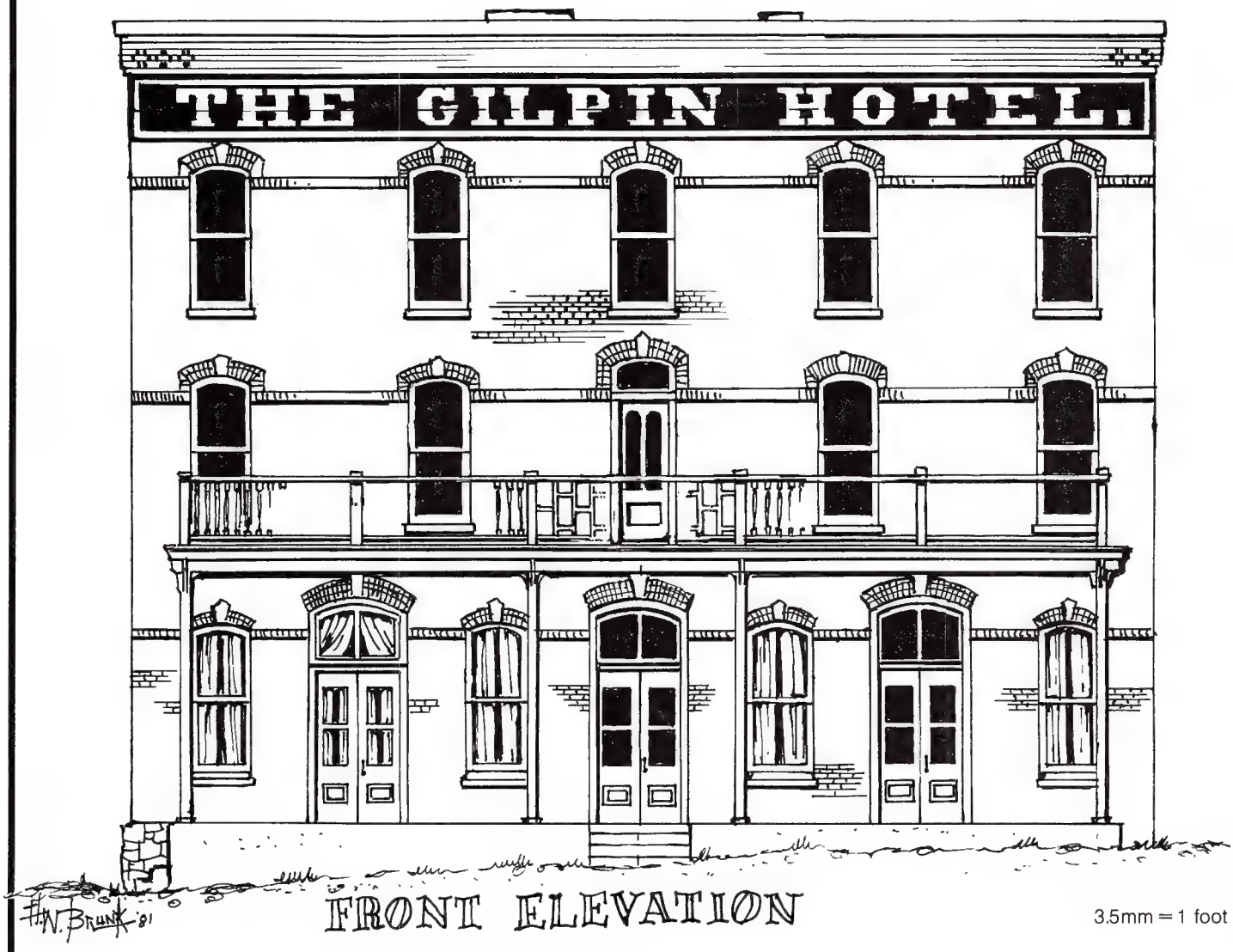
Window frames, porch railings and other wood trim, were commonly painted a dark color such as black or olive green on these old buildings. I chose olive for the UC&N Gilpin Hotel, though I don't know what color the original was. Mine looks right. I was forced to restrict my version of the Gilpin Hotel to little more than a "flat" because the building nestled up against my backdrop.

Before I leave Black Hawk, I should mention the "period" on the end of the Gilpin Hotel sign. Whether it was the style in early days, or merely a trademark of a specific sign painter doing his work in Black Hawk and Central City is unknown, but many signs in the area sport just such a "period". Even the depot sign has a "period" after the name Black Hawk.

Next I'll describe my Union Central and Northern model of Black Hawk, complete with track plan and a few shots around town. It's my attempt at meeting the challenge of catching the flavor of an actual mountain community in miniature.

The rear frame addition to the present day Gilpin Hotel. This view was taken from the edge of the cut where the switchback began its climb to Central City.

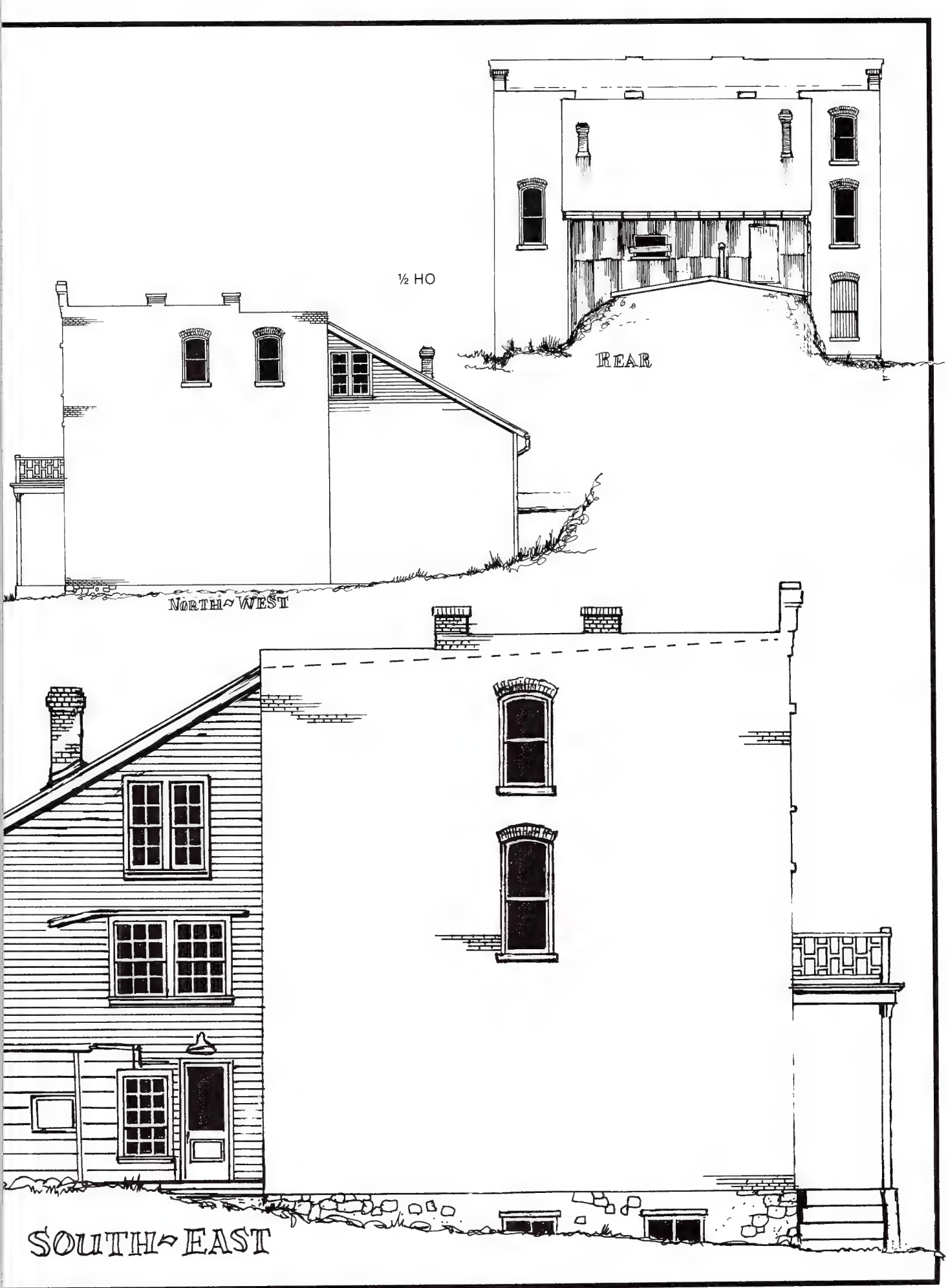
The front of the Gilpin Hotel in Black Hawk, Colorado as it is today. The roller assembly in the foreground is from a long gone mill.



FRONT ELEVATION

3.5mm = 1 foot

The UC&N Gilpin Hotel. Unfortunately space allowed only little more than a flat, but it serves its purpose by adding elegance to town.


½ HO
REAR
NORTH-WEST
SOUTH-EAST

A Kitbashed Narrow Gauge Coach

by Albert E. (Al) Turner Jr.
Photos by the author

Throughout the history of narrow gauge railroading in Colorado, standard gauge equipment was frequently converted to narrow gauge. Often this was simply a matter of exchanging standard gauge trucks for three-foot trucks. On the Rio Grande, the rotary plows and many tenders were converted in this way. In some cases, even locomotives were converted from standard to narrow gauge, with the standard gauge superstructures installed on new narrow gauge frames and running gear. Some cars, such as flats, were even "kit-bashed" so to speak, by removing a section down the center.

As far as I know, however, no standard gauge passenger cars were ever converted to narrow gauge, although I have seen photos of narrow gauge cars running on standard gauge trucks. Even though the prototype did not convert passenger cars to narrow gauge, that is what this article is about. The basis for the conversion is two Model Die Casting Overton coaches, which will make one car. However, with the acquisition of an additional car body, the parts left over from the first conversion can be used to make a second. The MDC Victoria Square kit No. 1512 contains two Overton cars plus a variety of other goodies such as HOn3 freight trucks and NG dummy couplers.

The Sides and Ends

First remove the sides and the ends completely from the sub-floor. Use a razor saw and with the car body upside down, carefully cut along the juncture between the sides and the floor. The ends are then removed in the same way. File or sand the rear of the sides and ends smooth to remove all traces of the sub-floor. Repeat the procedure for the bodies of both cars.

For identity purposes I will number the four sides. Side #1 is one of the sides with the full set of 9 windows. Side #2 is the other side of the same body, which has 8 windows and a blocked-up one. Side #3 is the side like #1 from the second car with the full set of 9 windows, while side #4 is identical to side #2, with the blocked-off window. Confused enough already? Bear with me, it will all come out in the end.

Photo 1 shows how the various sides are cut. Side #1 is cut along the outside frame of the last window from the right end, removing the small end section between the window and the end of the car, #1B. Side #2 is cut off along the left frame line of the third window from the blocked-out one. The small right section now becomes #2B. Side #3 is cut off along the right frame of the fourth window from the right end, the smaller right section becomes #3B. Side #4 is cut off along the left frame of the blocked-out window.

You want to end up with a coach that has 12 windows on one side and 11 windows plus a blocked-out one on the other. Photo 2 shows how the sides will be joined. The small section #3B, with the 3 windows will be joined to the large section #1A giving that side the necessary 12 windows. Section #2B with the 3 windows and the blocked-out one will be joined to side #4A, giving it a total of 11 windows and the blocked-off one. Check to be sure that both sides are the same length. The remaining sections are not used on this car, but can be used in converting additional bodies. In order to approximate more closely the appearance of a Rio Grande car, the entire section containing the blocked-out window can be removed and replaced with a section of scribed styrene.

Three easy ways you can modify the ends are shown in Photo 3. You can construct the ends; you can modify the original ends or there are two ways you can make new ones resembling Rio Grande ends.

If you want ends with the doors and windows use the original ends. First, remove the outer edges of each side by cutting along the outer edges of both window frames. Another cut is then made along the inner edges of both window frames, removing them from the door. The small sections remaining on each side of the door frames are then removed. The doors and window sections are then reassembled, resulting in an end which is seven feet wide. When they are placed between the car sides, the result will be an eight-foot wide body. Do not glue the sides and ends together yet.

The second end utilizes only the door from the original. Remove the door by cutting along the outer edges of the frames. The tiny strip across the top of the door is also removed. Two pieces of scribed styrene 2¼ scale feet wide by 6¼ scale feet high are then glued to each side of the door frame. A piece of 2×4 inch strip is then glued, wide side down, across the top of the end.

The end with the Rio Grande type arch-door is made from a sheet of scribed styrene sheet, seven scale feet wide by six and ½ scale feet high. Since the Grandt door is made for an arch-type end and the roof of this kit requires a flat topped end, about 1/16 of an inch has to be cut off the door casting. A hole is cut in the scribed sheet of the new end to fit the door casting. A ¼-inch paper punch is helpful in nibbling out the arch of the door cut-out. A 1×10 scale inch facia strip is added across the top of the end. It also has to be cut out for the arch of the door.

The Sub-Floor

I believe that some weight added to the car is desirable, so the original sub-floor is used. The flat weights are inserted between it and the underframe. The original sub-floor had to be modified. I removed the cast-on truck screw bosses, then trimmed one side of both sub-floors straight, since they were not too straight after sawing off the sides. The other edges are then trimmed off so that the floor will be seven scale feet wide. The ends of the sub-floors are then trimmed off square and cemented end to end. One end of the sub-floor is then cut off so that the floor is 38 scale feet long overall. If you are using the ends with the Grandt Line doors, the ends of the sub-floor will have to be inset to clear the rear of the Grandt castings. A new sub-floor can be cut out of .030 sheet styrene with measurements identical to the original floor.

Prior to assembling the body, round off the ends of each side from the facia strip

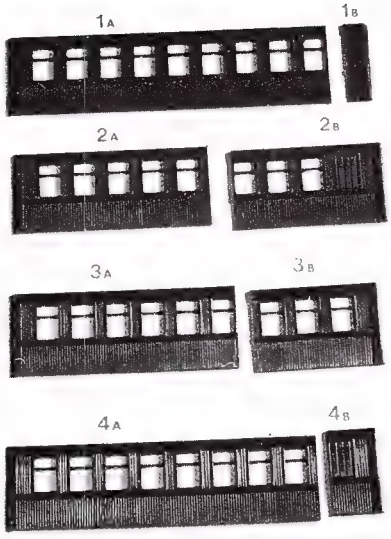


Photo 1: How the sides of the Model Die Casting Overton coaches are cut.

down. Next scribe a line along the bottom of the rear of each side, 5/32 inch up from the bottom edge. This marks the bottom edge of the sub-floor, which now can be cemented to the car sides. The ends of the car are mounted to the body with the top flush with the sides. Since the ends are very thin, it would be a good idea to add 4 × 4 scale strips in each interior corner for reinforcement.

The Frame

The standard gauge frame supplied with the kit is much too massive for use with a narrow gauge car. I discovered on the first car I converted that the modifications were so extensive that it was far easier to start out fresh and scratch-build an entirely new frame of .030 scribed styrene. The steps from one of the original frames were used. Photo 4 shows the

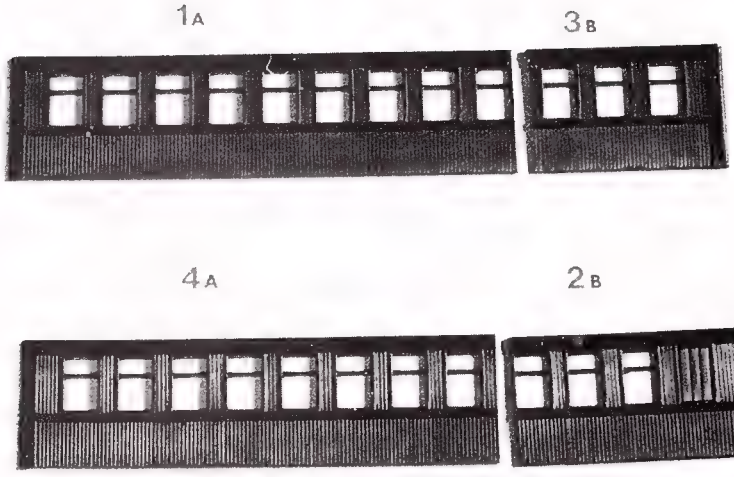


Photo 2: The sections of the sides that will form the two sides of the new coach.

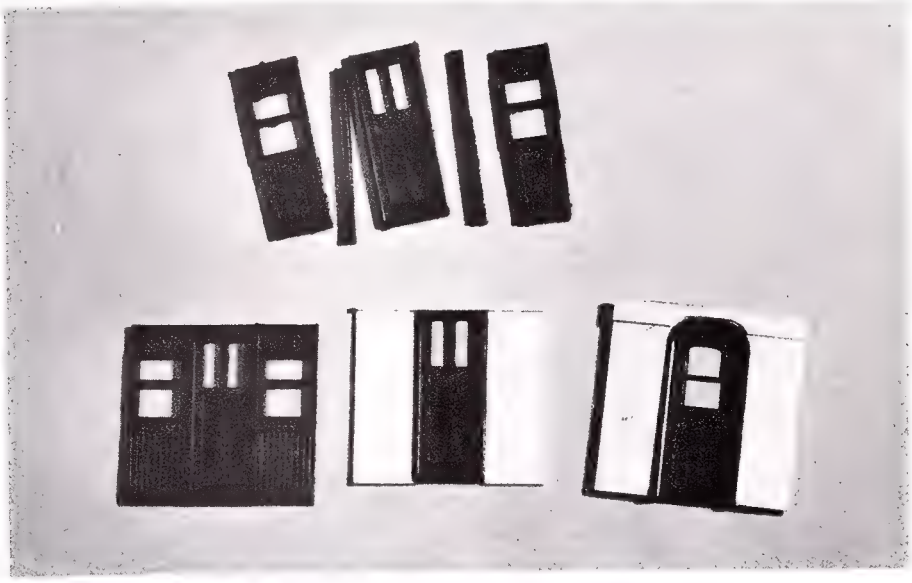


Photo 3: The variety of car ends that can be used. At the top, the original end has been cut to be reassembled into the end shown on bottom left. The end shown in the center is made of the original door flanked by scribed styrene sheet. The end shown on the lower right is made from a Grandt Line door and scribed sheet.

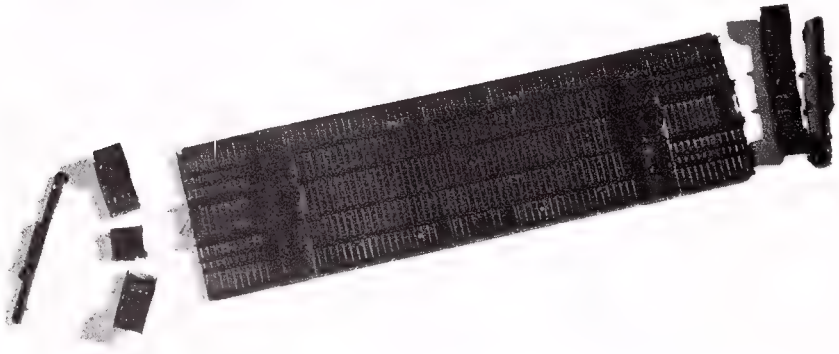


Photo 4: The removal of the steps from the underframe casting. After their removal, the coupler pocket is also removed as seen on the left, and the two-step section is glued together.

modifications. The end sills are first removed and discarded. The steps are cut from the frame between the frame and the rear of the steps. The steps are modified so that they are seven feet wide by cutting along the interior side of the coupler pocket casting and separating the two halves. The remaining section of the coupler pocket is then removed and the two halves cemented together. After the cement dried, the platform floor was very lightly sanded and the grooves were restored using a razor saw blade.

The new underframe is 39 scale feet long by seven feet wide. After cutting out the frame, scribe the centerline down the frame. An easy way to do this is by using a pair of dividers to find the center and mark the line. Six longitudinal frame members of .020 × .030 strip styrene are needed. The center two are mounted one scale foot to the outside of the members from the center line. The two mid-frame members are then mounted one scale foot from outside of the center members to the outside of the member. The outer frame members are mounted flush with the outside edge of the frame floor.

The truck centers are five scale feet from the end of the frame and are marked on the centerline. Bolsters of .030 × 1 scale foot are then cut to fit between the midframes. A one foot wide gap is then cut out of the center frame members at the truck centerline and the bolsters installed. A piece of .020 × 1 × 1½ styrene is then glued on top of the bolster, to complete it.

The needle beams, 7¾ scale foot lengths of 6 × 6 are mounted 15½ feet from the ends. Four Grandt Line five inch queen posts, #5051, are mounted on each needle beam. The outer post is one scale foot from the end of the beam, the next set are mounted one and one-half feet from the first. Both measurements are to centerline of the post. Number 65 holes are drilled eight feet from each end for the truss rods. The outer hole of each set is seven inches from the edge of the frame, while the inner set is 2¼ feet from the outer edge.

The nylon thread supplied with the kit is threaded through the holes and over the queen posts as in the original kit instructions. The appearance is greatly improved by threading Grandt Line turnbuckles on the truss rods. The turnbuckles have to be drilled out with a #75 drill and threaded on the nylon as it is installed. it will help if a drop of ACC is put on the end of the thread to stiffen it. After the truss rods are installed, the turnbuckles are centered between the queen posts and secured with ACC, which should also be added to the tips of the posts and in the thread holes.

The steps can then be glued to the ends of the underframe. Four short lengths of 4 × 4 inch by one foot styrene, angled toward the center of the car are glued on top of the mid frame members butting against the rear of the steps to prevent the steps from sagging. At this point it's time to mark the bolster center locations on the

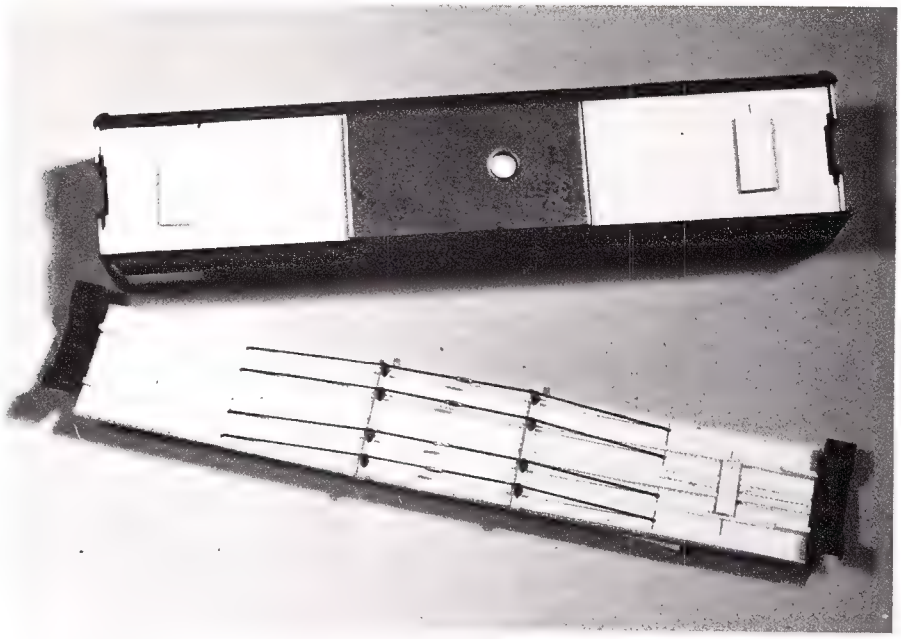


Photo 5: The new underframe and the underside of the car body. The spacer blocks under the sub-floor have been installed.

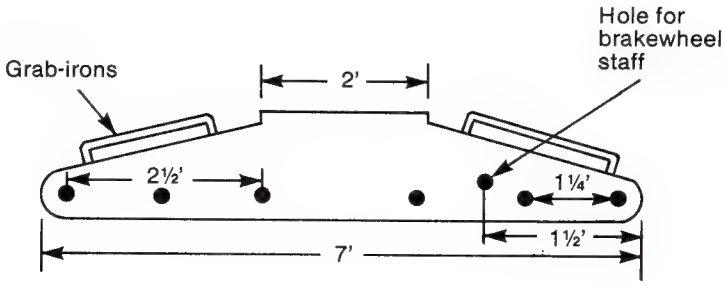


Figure 1.

Photo 6: How the roof is cut. Note that the clerestory itself is not cut. Only the side roof panels are cut and the center sections are discarded.

underside of the body sub-floor and install .040 × ¼ × ½ inch spacers for the truck screws on the underside of the floor. Photo 5 shows the new underframe and the spacers mounted on the sub-floor. Although only one of the weights is shown, both can be used.

New endsills are cut out of 6 × 12 strip styrene. The holes for the handrails are drilled out before assembly to the steps, as shown in Figure 1. They are then cemented to the end of the steps, flush with the top.

The Roof

The trickiest part of this conversion is the roof. The cutting of the roof is shown in Photo 6. Twenty-one scale inches had to be removed from its width. The clerestory section remains the same width as on the standard gauge car, therefore 10½ inches must be removed from each side section of the roof. First, scribe a line one and one-half scale feet from the side edge of both sides of the roof. Cut along the scribed line several times with a sharp modeler's knife, then complete the cut with a razor saw. Cutting the roof can be very tricky due to the thickness of the clerestory window frames, so all cutting must be carefully done. The outer section is removed from both sides of the two roofs.

The next cut is along the edge of the clerestory section itself, using its edge as a guide. Again care must be exercised. This section is discarded; it comprised the 10½ inches we needed to get rid of. A small modeler's bench saw would probably be extremely helpful in cutting the roofs and would be much easier than the knife and razor saw method.

It is best not to make cuts across the roof to adjust length until all the longitudinal cutting is completed. The window posts are very fragile and the complete roof with its ends provides support. The side roof sections are too short to fit the clerestory due to the curved ends of the roof. Fit, cut and splice the clerestory section first and add the side roof sections later. Photo 7 shows the cutting of the two roofs. On the first roof, only the curved end from the outer edge of the first window is cut off. The second roof is cut off along the right edge of the fourth window, leaving the third window from the short end without a frame on its left side. This small section will be joined to the larger section of the first roof to provide the completed roof. Scrap strips of styrene are glued behind the joint to reinforce it.

The side roof sections are then glued to the clerestory. This is a cut and fit assembly, however the joints in the side panels should overlap those in the clerestory. Scrap strips should also be glued behind these joints; however, make sure that you leave the roof to body mounting flanges clear.

Most narrow gauge passenger car roofs seem to have a more pronounced peak extending downward at the ends than the MDC roof does. I filed the ends of the roof assembly slightly flat and glued a piece of scrap styrene .040 thick and about ⅛ inch wide to the underside of each end. This added material allows you to reshape the curved end of the roof to provide the lower peak. Skip this if you shudder at the thought of reshaping a passenger car roof, but it is really not that difficult, and the finished result is well worth the little extra effort. Photo 8 shows the underside of the spliced roof.

Be liberal with the cement at all the roof joints; the cement will help fill some of the smaller gaps. Don't despair, your roof will look pretty terrible at this point; but after a little application of model putty, filing and a little sanding, it will look great.

I made an additional modification to the roof that I think improves the appearance of the car immensely. If you take a good look at the top of the clerestory, you will notice that the top of the roof is not arched but is actually flat with a hump down the center. The roof casting is thick enough so that this hump can be cut down and a smooth arch given to the roof. I used a drum sander in a Dremel tool, plus some filing and sanding. Be careful near the roof edges since the casting is not too thick there. Use a little putty along the edges of the former hump and the flat roof, if you end up with a small depression there.

All the roof joint gaps, etc. are filled with plastic model putty and the assembly set aside to dry. Go back to the car body and fill any joint needing it.

After the roof has dried reshape the ends. The curve of the original end is carried on down into the piece of scrap that was added on the underside, maintaining the contour of the original curve. This is done by filing and sanding. The bottom curve was shaped using a small tubular grinder in the Dremel and finished with a piece of sandpaper wrapped around the handle of a #1 X-Acto knife. The end of the roof should also be slightly concave across the underside. This can be done by placing a sheet of sandpaper on the side of a large can, one about five inches in diameter is about right, and rubbing the bottom end of the roof back and forth on it.

If all your cutting has been done correctly, the roof will fit neatly on the car body, the flanges under the sides should snap into the sides of the car body. if it doesn't you will have to do a little fitting.

Fascia strip extensions are added to those already cast on the car side to carry them under the roof end overhang. They are cut from 4 × 8 strip styrene. With the car body with the roof attached lying on its side, place the strip against the existing fascia and with a sharp pencil trace the contour of the lower roof curvature on it. The inside curve is then drawn on by

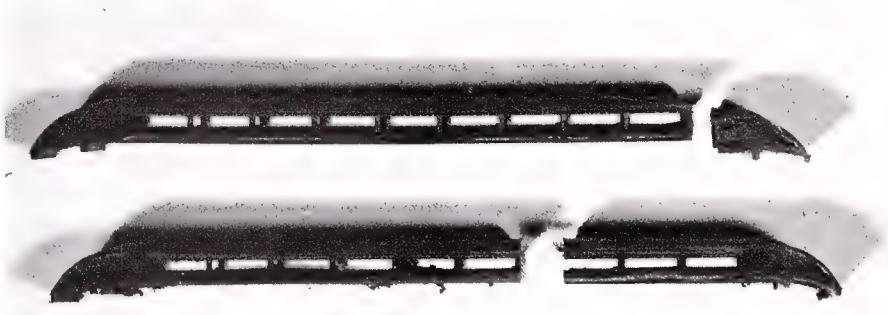


Photo 7: The cutting of the clerestory sections. The short section on the bottom right will be spliced to the larger of the sections at the top.

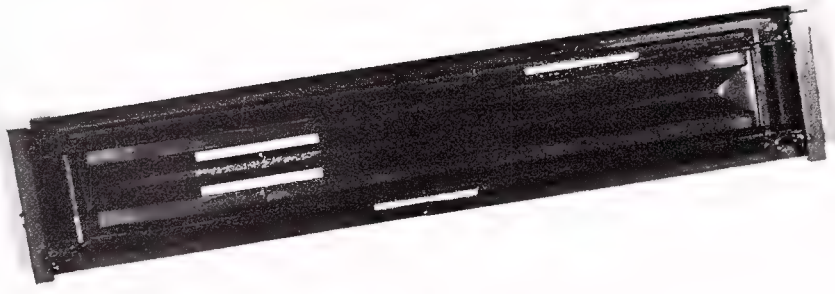


Photo 8: Scrap styrene is glued under the splices of the roof for reinforcement, and it also has been added to the bottom of the roof ends to increase the lower peak at the ends.

eyeball and cut out using a small (about ⅛ inch diameter) grinder in a Dremel tool. The outer curve is then cut out, fitted to the underside of the roof overhang, then glued to the fascia end on the body. Do not get any glue on the top roof curve since we want the roof to be removable. When all four were fitted and glued into place, I glued tiny sections of Plastruct angle to the rear at the juncture of the extension and the body. Any gap at the joint is filled with putty and when dry, sanded smooth.

Figure 2 shows the handrails. The handrails are bent from .016 brass wire. The original handrails are not used since they are oversize, made of rather stiff wire and would be difficult to reshape. The handrails resembling an upside down "L" are to be mounted on the ends of the car body on each side of the door. The short upper leg is one and one-half scale feet long, while the longer one is two and three-fourths feet. They are mounted to the car through #75 holes and glued from the interior with ACC. The "U" shaped sections are mounted to the endsills first then the center bar is installed. They are glued from the bottom using ACC. I prefer not using the brakewheels supplied with the kit, but substitute the finer detailed wheels from Grandt, Kemtron or Cal-Scale. These are glued to a piece of .016 wire about four scale feet long and mounted just in front of the handrails, on the left side looking toward the end of the car. Two grab-irons are mounted on the face of the end sill near each end.

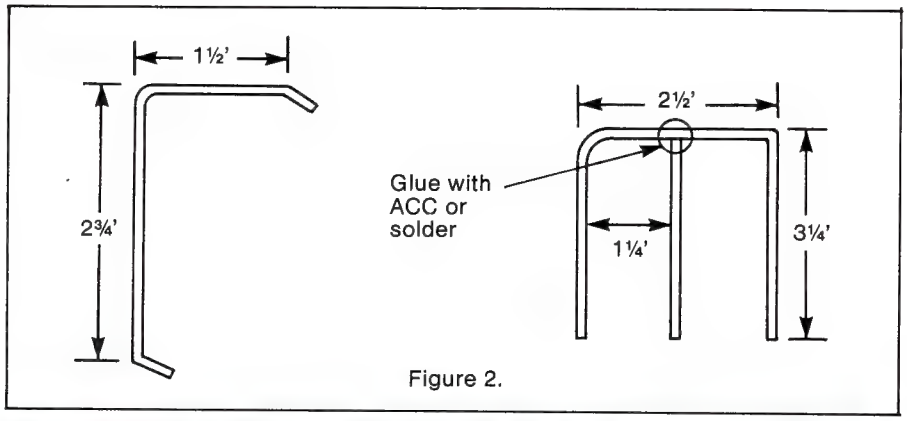


Figure 2.

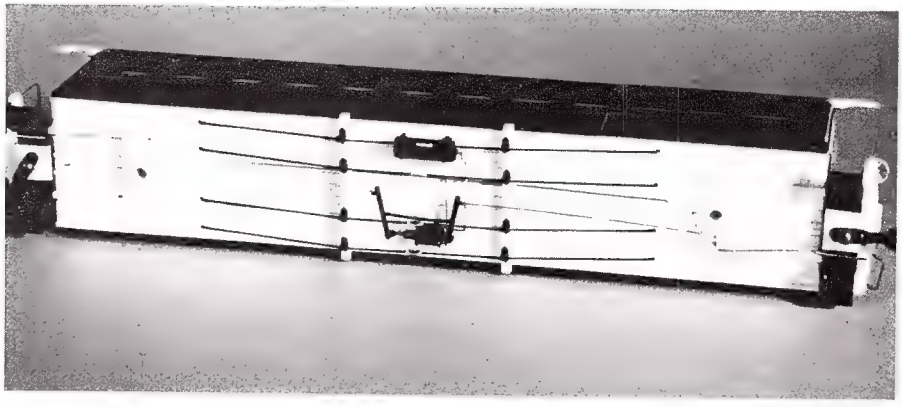


Photo 9: The completed underframe with the brake gear added.

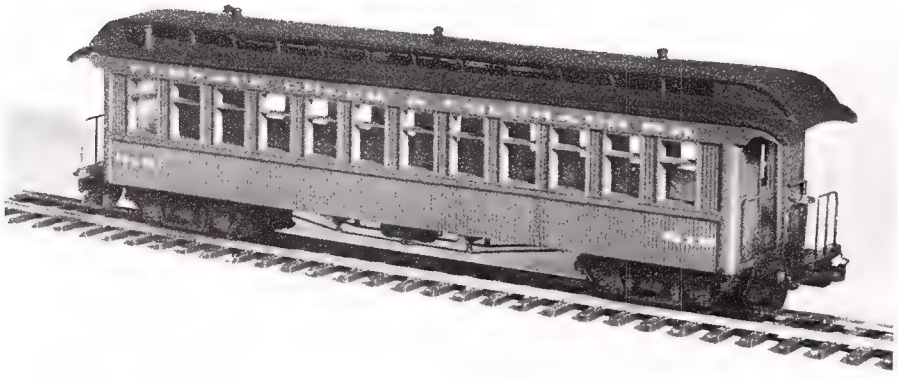


Photo 10: The finished car, painted and lettered.

Final Details

Grandt Line brake set #5121 is mounted on the underframe as shown in Photo 9. The couplers of your choice can be mounted to the underframe between the steps. Scraps of styrene will probably have to be inserted to adjust for correct height.

Looking over plans and old photos of passenger cars, there seems to have been as much variety in roof ventilator installations as there were cars. I used only the three ventilators that are on one sprue of Grandt Line's passenger car roof detail set, #5043. Four complete sets are included in the package, so more could be used if desired. I installed one on the center of the roof, with the others nine scale feet from each end.

The smoke jack is mounted on the side roof section, five and one-half scale feet from the end of the roof. It mounts above the blocked-out window. The other vent included with the set is the toilet vent. It mounts on the other side of the roof opposite the smoke jack.

E&B Valley, Rio Grande and several other manufacturers make HOn3 trucks suitable for this car. I recommend that you replace the wheels sets supplied with the E&B trucks with those made by either Grandt or Rio Grande. The E&B trucks come with a bolster casting which I did not use. The rollers at the ends of the castings can be cut and glued to the bottom of the underframe if desired.

Your car is now ready for the paint shop. I personally prefer the old standard: coach green, but the color is up to you. Champ makes a beautiful set of alphabet decals for narrow gauge cars: 3/64 inch Chelsea. Since my cars are painted coach green, the L-153 bronze gold set is a real knockout.

So there you have it – as good a looking narrow gauge coach as available anywhere. True, it took two Overton coaches to make the first car, but you still have a lot of stuff left over to start on another car. Acquire another coach, combine, or even a business car, and you can build a whole string of distinctive cars. Come to think of it, there is also a baggage car available. How about a combine plus a baggage car? I think it would make a neat mail car.

Parts List:

2 Overton coach kits or 1 #1512 kit (MDC)
1 pair narrow gauge passenger trucks (E&B Valley, Rio Grande)
1 Passenger car roof detail (Grandt #5043)
1 Brake set, Tender or Passenger car (Grandt #5121)
8 Queen posts, 5 inch (Grandt 5051)
2 brake wheels (Grandt, Kemtron, Cal-Scale)
Styrene sheets and strips

NARROW GAUGE of the PENNSYLVANIA LINES

Photographs from the collection of Lyndon C. Roach, courtesy of Morgan J. Gayvert.

Waynesburg & Washington R.R. Passenger Car Roster 1917 – 1933

No.	Type	Builder	Date	Length	Date Retired
1	Baggage-Express	Second Hand	1899	36'3"	1930
2	RPO-Passenger	Billmeyer & Small	1883	35'0"	1927
3	RPO-Passenger	Billmeyer & Small	1887	35'0"	1933
4	Baggage-Express	Billmeyer & Small	1887	35'1"	1928
5	Coach	Jackson & Sharpe	1892	35'0"	1 in 1928
6	Coach	Jackson & Sharpe	1892	35'0"	1 in 1930
7	Coach	Second Hand	1899 – 1902	39'10"	3 between
8	Coach	Second Hand	1899 – 1902	39'10"	1917 – 1927
9	Coach	Second Hand	1899 – 1902	39'10"	1 in 1928
10	Coach	Second Hand	1899 – 1902	39'10"	
11	Coach	Second Hand	1910	35'0"	Between 1917-1927
12	Baggage-Express	Second Hand	1902	40'0"	1933
13	Coach	Second Hand	1910	35'0"	1930

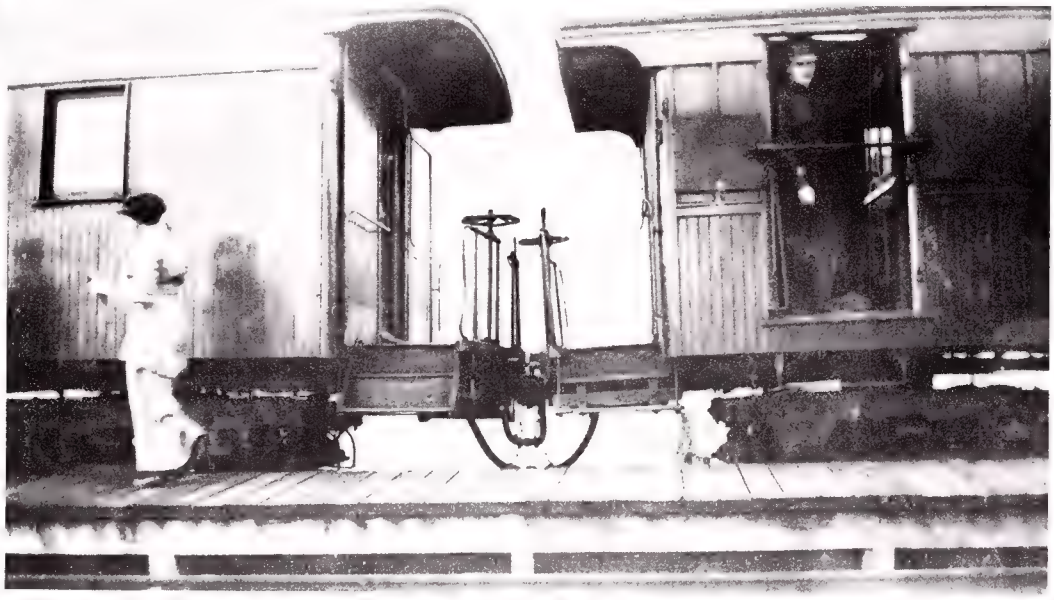
Compiled from ICC Valuation Inventory Data dated June 30, 1917 and subsequent reports of retirements. *Dates for cars indicated as having been purchased second hand are dates of purchase.*

The last scheduled northbound passenger train at Waynesburg on July 9, 1929. The cars are coach #6, observation #13 and baggage-express #12.

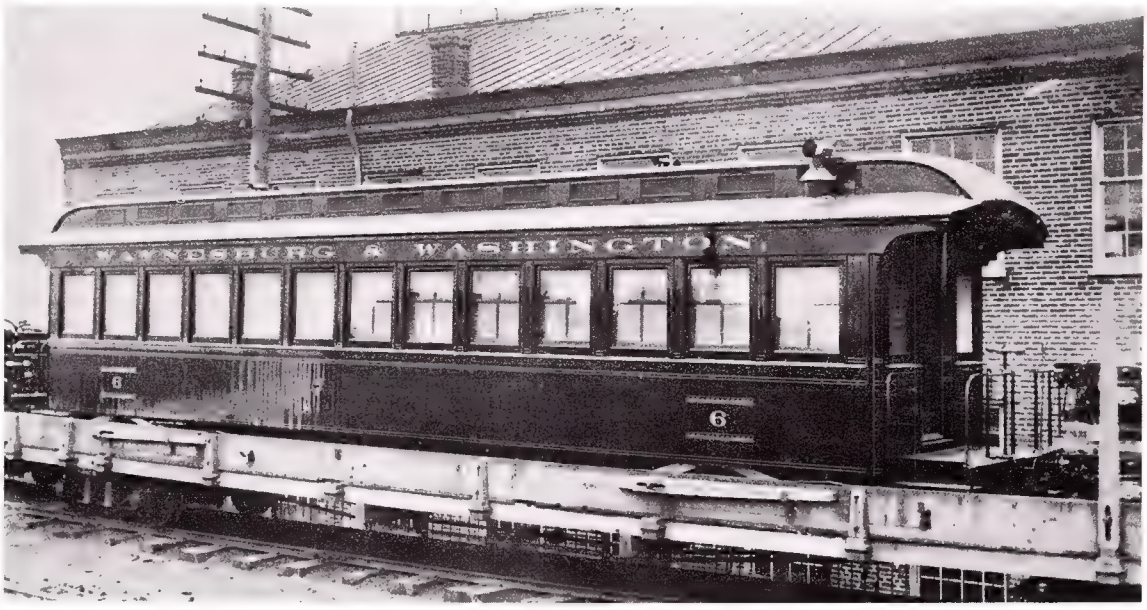
The second #4 with baggage/express #12 and observation #13 at Washington Station headed for Waynesburg on the final day of operation on July 9, 1929.

The second #4 with baggage/express #12, observation #13 and coach #6 on the last run to Waynesburg on July 9, 1929.

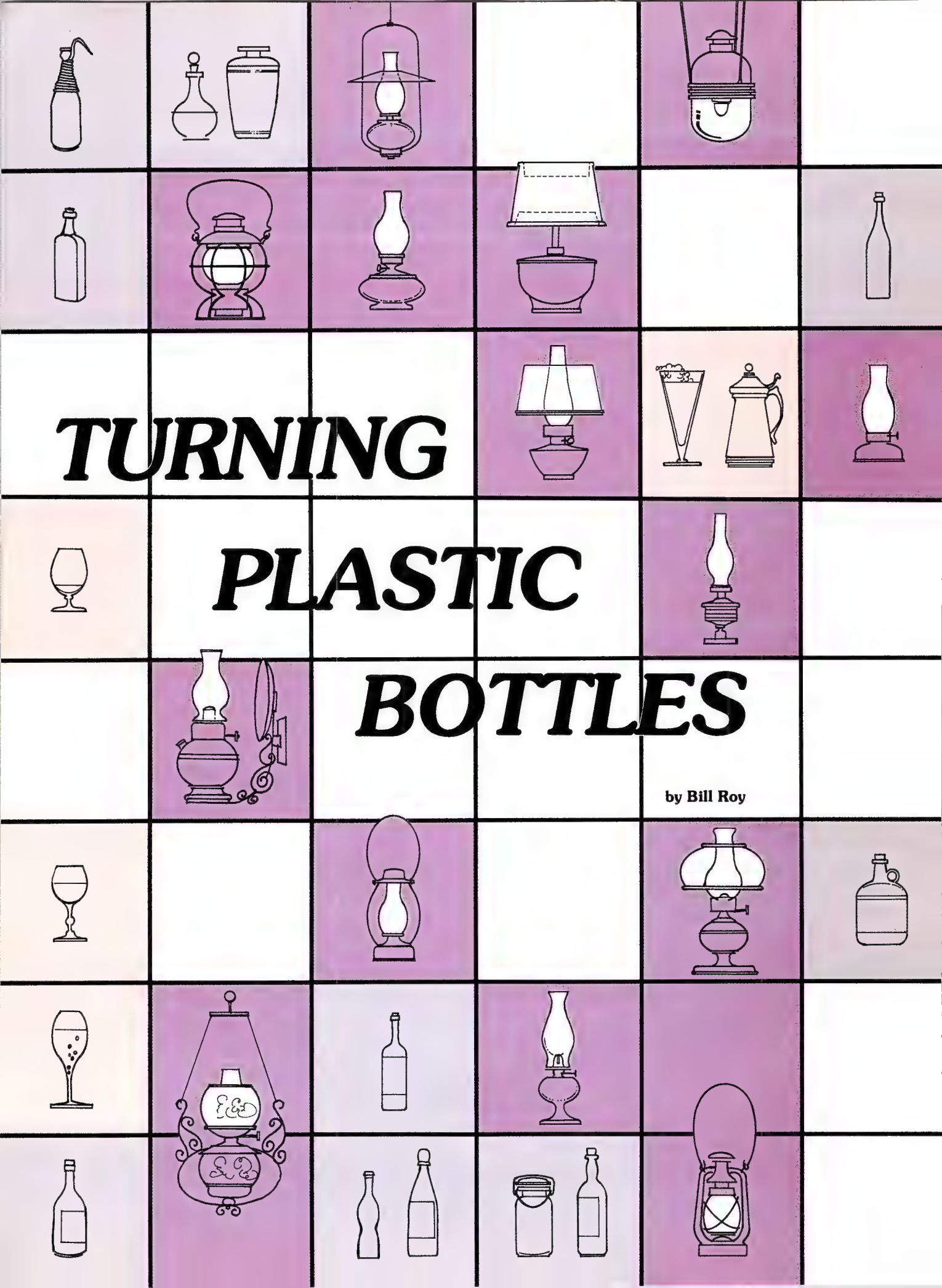
Engine #6 and baggage/express #4 with RPO/passenger #2 or #3 and coaches #5 and #6 in an early view at Waynesburg. The train is headed for the up run to Washington. Number 6 looks relatively new and fixes the photo date around 1903. Of interest is the small bronze eagle on the locomotive headlight base just below the lens.



In this photograph, which was taken around 1910, a W&W passenger train pauses at Hackney on the northbound run. The cars are baggage/express #1 and RPO/passenger #2 or #3. Both were built by Billmeyer & Small. Note the mail hook support bar in the door of the RPO/Pass. car. The platform connections show two sets of hoses. One is for the vacuum brakes and the other is for the steam heat for the train which was radiated from the side panels of the cars. Also note that sly look by the trainman and the well turned ankle passing by.



Coach #6 on a delivery flat car at the Jackson and Sharp plant in Wilmington, Delaware in 1892.



TURNING PLASTIC BOTTLES

by Bill Roy

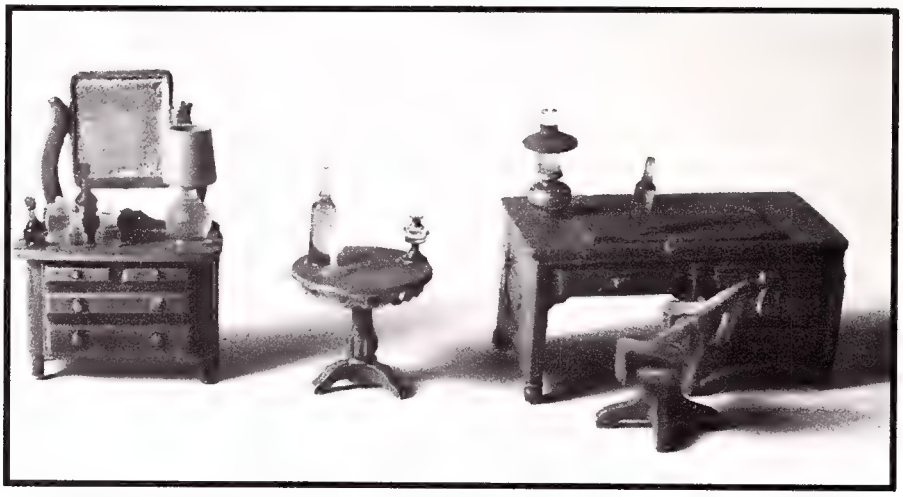
A few years ago while detailing some buildings and camp cars, I wanted something more effective than the cast soft metal "bottles" available in HO scale – something that had the shine and transparency of glass, and that would pick up light and reflect it. My scale railroadmen and loggers ignore "No Drinking" rules and needed to leave a trail of "glass" bottles about their premises and in the ditches and garbage cans of my layout.

I discovered extruded plastic (acrylic) rod in small diameters at a local plastics supplier. It came in exotic colors like "bottle green", "beer bottle amber", "lantern red", and "Milk of Magnesia blue" besides clear. Since I don't have a lathe, I simply chucked a small piece of this rod into my Dremel Moto-tool, and using a new No. 11 X-Acto blade, tried to turn down some bottles. After a couple of tries, I was manufacturing bottles in a few minutes each.

Soon, the possibility of other "glass" items presented itself . . . lamps, lanterns, gas pumps, clear bottom beer steins, wine glasses. The ultimate challenge was an HO scale hollow stem champagne glass. Not only are they possible, but with a bit of patience and a fairly steady hand are quite simple, and add immeasurably to a railroad scene. Although I have not yet done any lighting of the lamps with bulbs or optical fibers, it is a natural. Larger items like gas pumps can be chucked into a ⅜ inch drill if you first check for excessive play in the drill shaft. Although not ideal, it works.

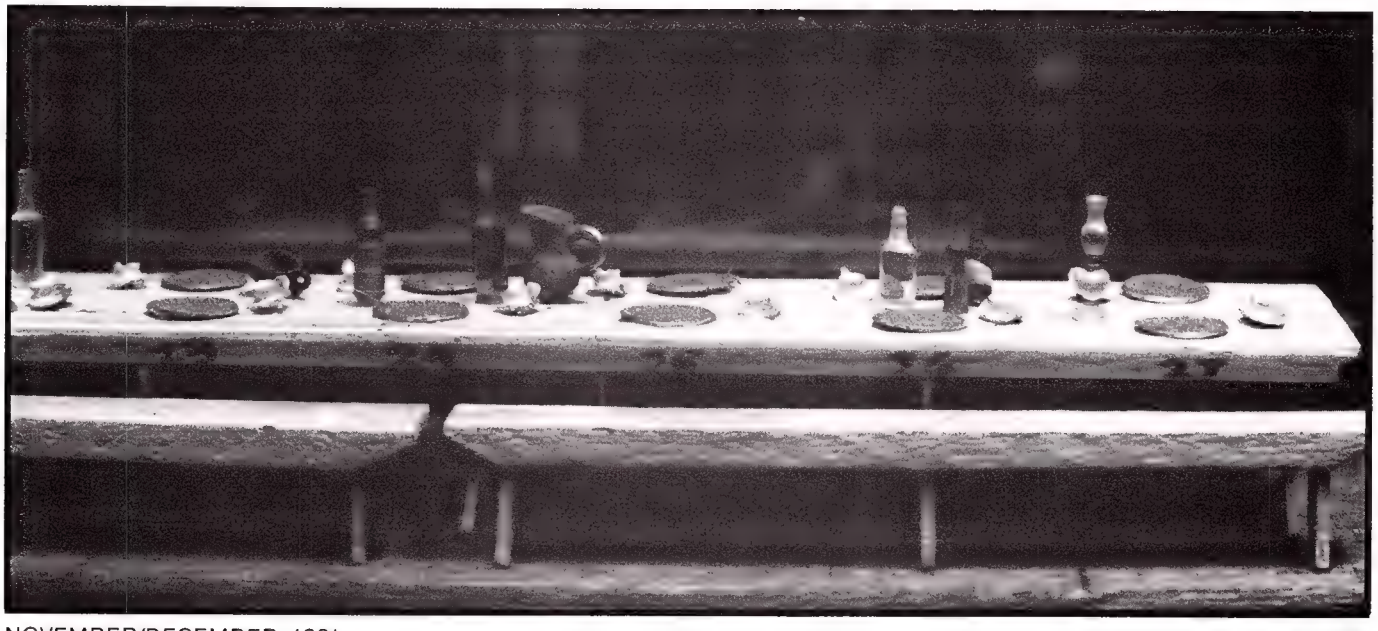
My methods follow:

Jugs, jars, and lamp in an HO scale kitchen camp car. The other details are from S. S. Ltd. *Photo by Bill Roy.*



Bottles and lamps in HO scale. The furnishings are by S. S. Ltd. *Photo by Bill Roy.*

HO scale dining camp car interior. The table service is by S. S. Ltd. and the bottles and lamps were turned in acrylic. Photo by Bill Roy.



The general procedures are:

1. First, *wear safety glasses,* or other eye protection. Select a short piece of acrylic rod – usually about one and one-half inches, and fit it deep into the appropriate size chuck on your Dremel. I usually extend the material beyond the chuck only a small bit farther than the length of the item to be turned, then later move the rod out once or twice more for additional bottles. *Cast* acrylic rod turns best, with less heat build-up, but is available only in the larger dimension. *Extruded* acrylic rod is what you'll find in the smaller sizes, starting at 1/16 inches with increments of 1/16 inch.

2. Start a turning session with a *new* blade – I haven't been able to sharpen a used blade to a keen enough edge to prevent heat build-up – the main difficulty that I've encountered in turning plastics. Use the slowest speed setting available, and start turning from the tip of the rod, moving progressively towards the chuck, especially if there are small diameter portions. Hold the knife at a slight angle to the work and use the tip, the edge, or the back of the tip of the blade as needed. Experiment!

3. Clean up the cuts, refine the surface and then polish the turning. I use a small piece of crocus cloth (a jeweler's rouge-impregnated, cloth-back "sandpaper"), or fine abrasives made for polishing plastics. Try "wet-or-dry" sandpaper of 400 or 600 grit for smoothing rough surfaces. Use water as a lubricant with either paper. Clean off the residue with a wet Kleenex. Caution: I've melted Kleenex into the surface of a few pieces by over-zealous cleaning.

4. If portions are to be painted – corks in the bottles, labels, brass portions of lamps, stripes on lamp shades, etc., do it before cutting the turning off and with the motor running. Use the paint sparingly or it'll spin off the piece in all directions.

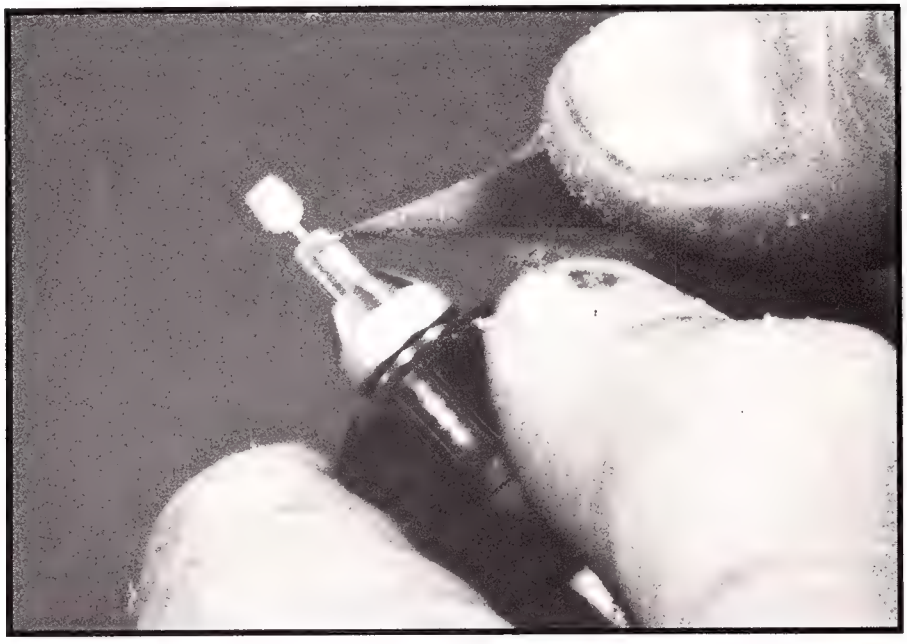
5. Using the tip of the knife, cut the turning off the rod. I usually break the last bit to avoid looking for clear bottles in the shag carpet.

Although I have an Opti-Visor, I seldom use it, prefering to work under a bright light over a contrasting piece of paper. A hand-held Dremel seems to give more control than a mounted Dremel.

Some other options are:

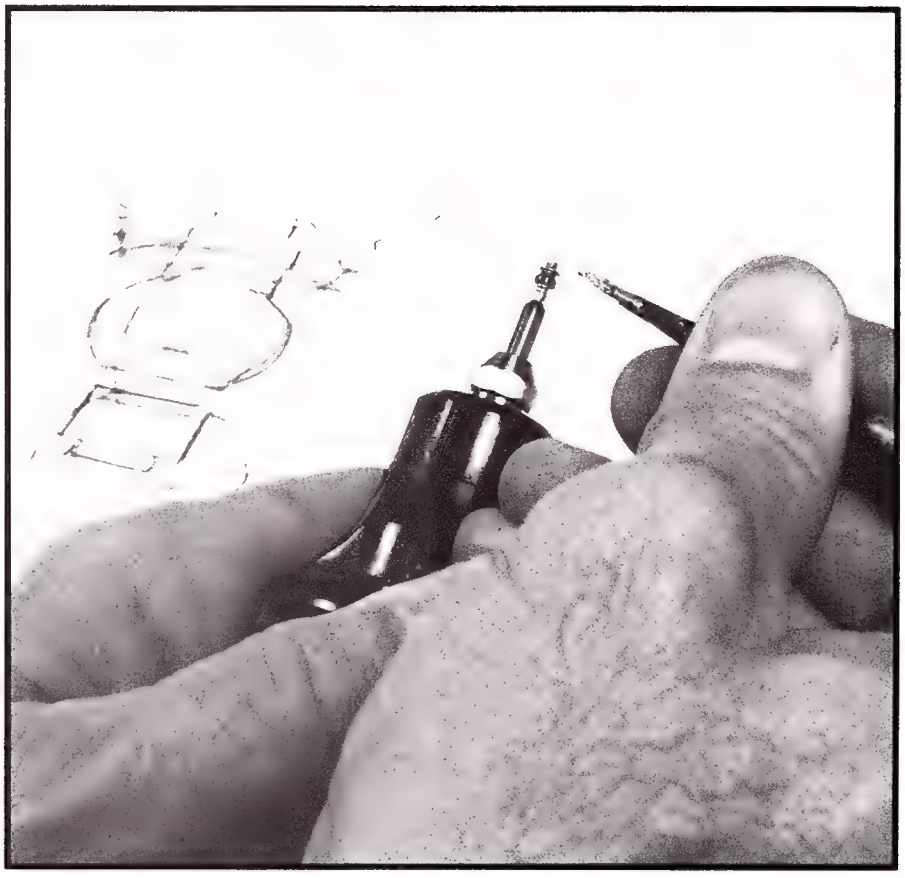
Flat sides bottles (for Gin and Milk-of-Magnesia), are made by turning the bottle and then filing the side(s) flat. Finger holes and handles on jugs can be formed from fishing monofilament or small bits of wire glued into holes. Lampshades can be turned onto the lamps with recessed cuts, top and bottom, that will not show.

A picture on page 98 of Kramer Adams' book *Logging Railroads of the West,* (Superior, 1961) shows three loggers spending a Sunday afternoon in a camp car amidst, by my count, 81 bottles and two kerosene lamps . . . Happy turning!



◄ Using a knife held vertically to hollow out the interior of a "snifter". *Photo by Kim Harrington.*

► Using a piece of wet Kleenex to clean off the polishing compound left by the crocus cloth. *Photo by Kim Harrington.*



◄ A ¼ inch scale "brandy snifter" being cut into a piece of ⅛ inch acrylic rod. The snifter is about ready to be cut off. *Photo by Kim Harrington.*

► Adding silver paint to ¼ inch scale Adlake red lantern. A wire loop and cage will be added later. *Photo by Kim Harrington.*

◄ A small piece of crocus cloth being used to polish a turned decanter. The darkness is the rouge compound contained on the crocus cloth. *Photo by Kim Harrington.*

If anyone has difficulty locating acrylic rod in their area, I'll forward a small selection of rods for $2.00 and a double stamped legal-size envelope. Specify scale and I can balance the sizes accordingly, but if you work in "N" scale . . . you're a masochist. Bill Roy, McKenzie Iron and Steel Co., P.O. Box 3695, Eugene, OR 97403.

Psst . . . The Narrow Gauge & Shortline Gazette is more than a model railroad magazine – it's a fellowship of fine modelers. Pass it on . . .

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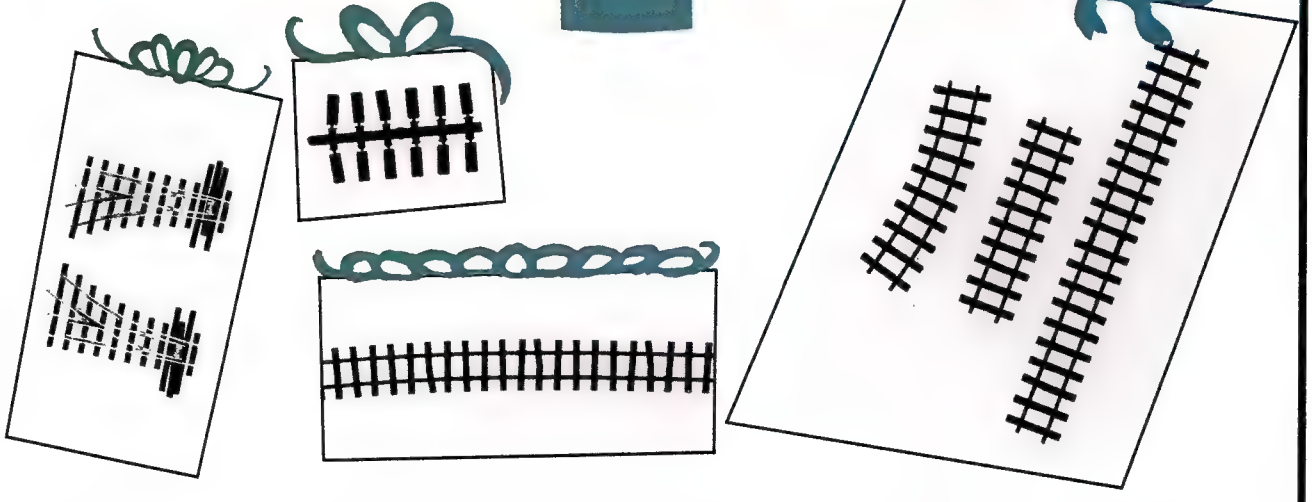
HOn2 1/2



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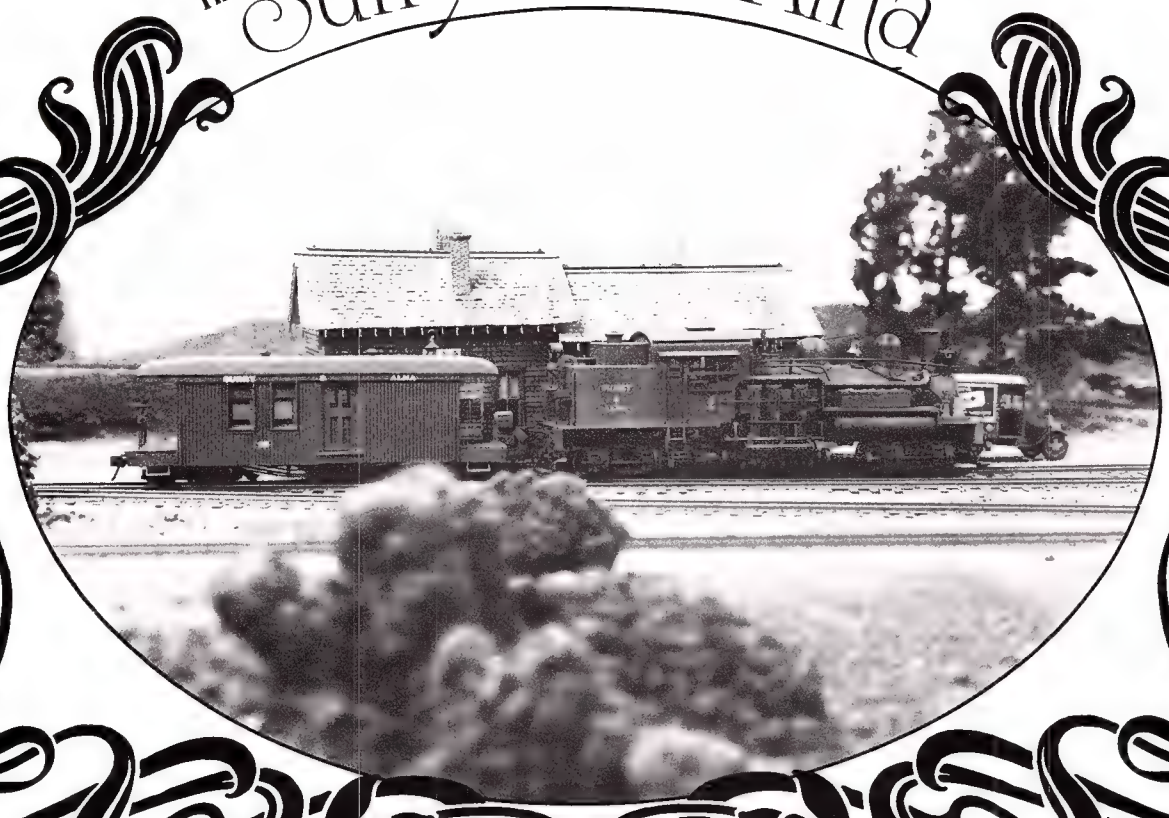
The Surry and Alna



by Dennis Lamarre
Photos by D. F. Feeney

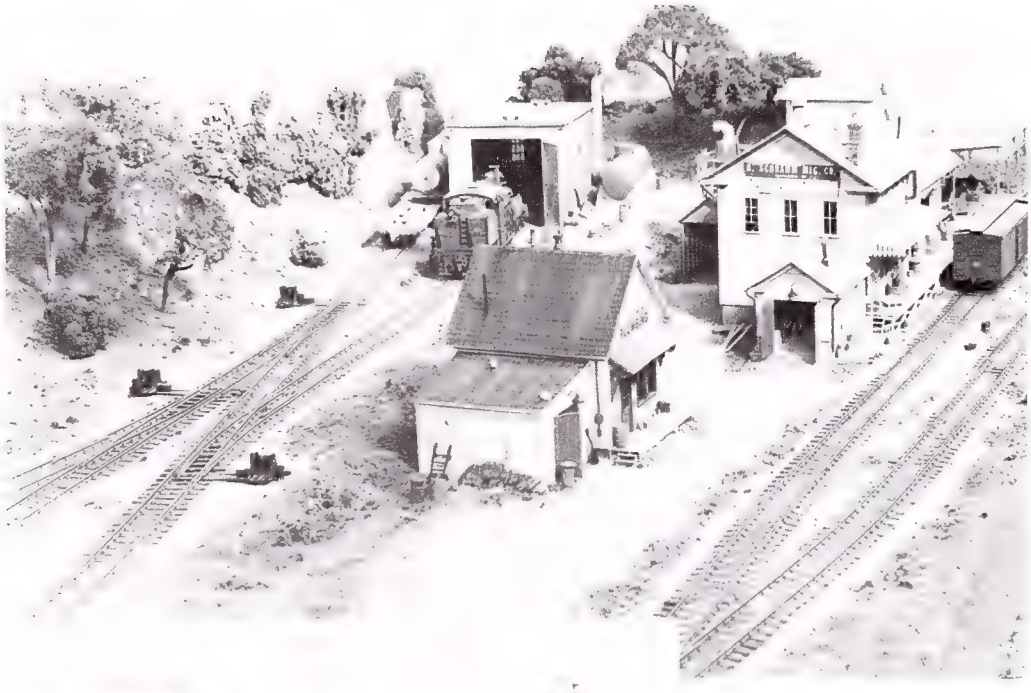
The Surry and Alna never really ran through the hills of Maine. But I've modeled this imaginary narrow gauge short line railroad in HOn3 as it might have been in the early 1930's.

My diorama is 2 feet by 8 feet and was built on L-girder framework with ½ inch plywood and homosote as a track base. Lambert code #70 flextrack and #6 turnouts were used throughout. Caboose Industries ground throws were used. The track was weathered with an airbrush using Floquil Roof Brown, Grime, Rust, and Grimy Black. Ballast is sand taken from the Maine Central Railroad's Lewiston – lower branch. This sand was sifted through panty hose for fine texture. The scenery is hard-shell. Woodland Scenics' ground foam was used for ground cover.

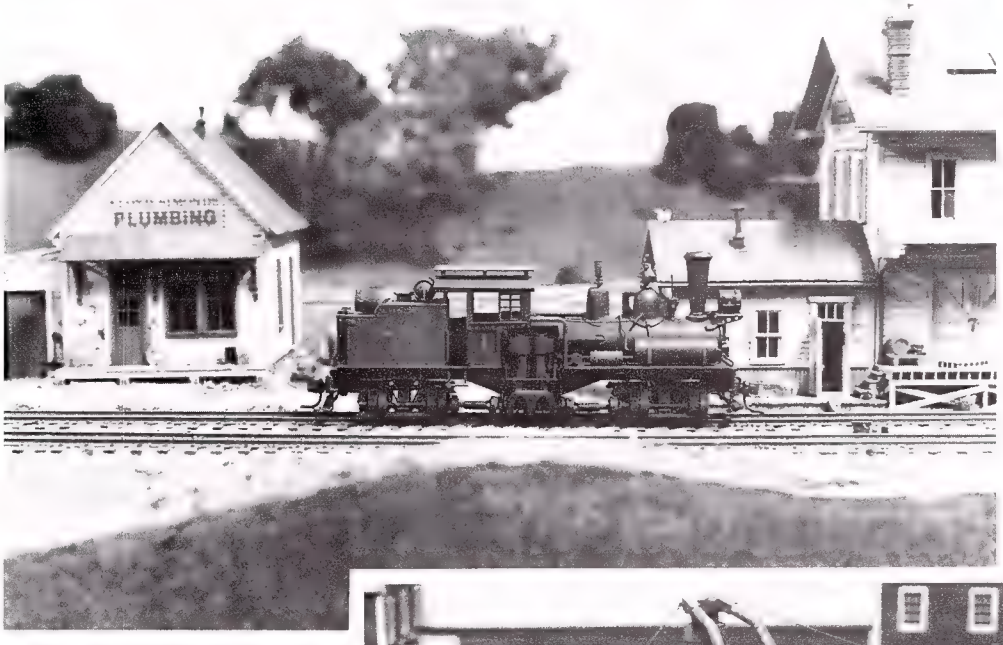
Two of the structures on the layout were scratch-built using Northeastern wood and Grandt Line windows and doors. The first is the Surry Slate Company. They ship finished slate products which are used in the building trade. The other is the Floyd Simmons Plumbing Company, which is kept busy thawing pipes in the Maine winters in Alna Village. Crocker Brothers Feed Mill, a Fine Scale Miniature Kit, generates traffic for the road by supplying grain and feed to the many poultry farms in the area. The depot is a modified Fine Scale Miniature Freight House Kit. It overlooks Schulke's General Store which has the only gas pump in town. The S&A uses the pump to fuel Goose #5, a Lambert import, which is the only passenger service on the line. Schulke's is a Durango Press newspaper office kit. Pallets and boxes are manufactured by Schramms Manufacturing Company which is also a Fine Scale Kit. These products are used locally as well as being shipped to Surry. Finished lumber for Schramms is brought in over the S&A. A Fine Scale Miniatures two-stall engine house was converted to a single stall shed. Here engines #1 and #2 as well as the rolling stock are serviced. Engine #1 is a West Side Models Ali-San Shay detailed with Cal-Scale and Kemtron parts. It was converted to an oil burner. Engine #2 is a West Side BN-1 Shay. Both engines were airbrushed with Floquil Engine Black, Grimy Black, Rust and Grime.

The diorama is portable and I have taken it to local Club shows where I may have converted some standard gauge modelers over to narrow gauge. The Port of Surry is still in the planning stages. This new module will also be portable and will make the finished layout 7 feet by 10 feet.

Title Photo: Shay #2 has just arrived at Alna with the Surry & Alna's caboose.



Engine #2 heads into the converted Finescale Miniatures engine house. The Plumbing Company is in the foreground.



Engine #1 waits outside the Plumbing Company while the crew takes a break.

The Crocker Brothers Company supplies feed to the area. This building was assembled from a Fine Scale Miniatures kit.

The crew of #1 await their orders at the Alna depot.

Engine #1 arrives at Alna with a box car for Schramms.

Goose #5 leaves Alna as #2 sets out some cars at the Slate Company.

HOn3 HOn3

3 New Kits!

from Clear Creek Models

D&RGW Pipe Gondola

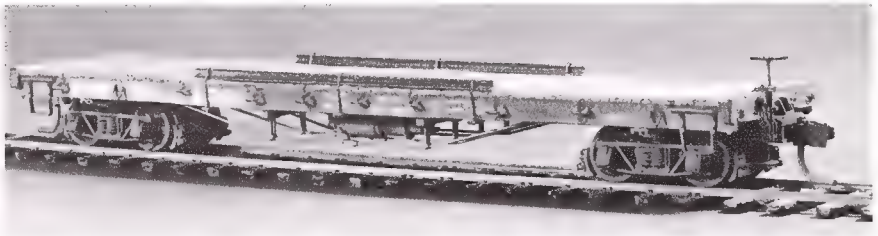
Used to haul trainloads of large diameter pipe to the gas and oil fields of northern New Mexico. Kit represents the 1500-1899 series cars. Injection molded body, Grandt hardware, brass brake wheel, new corner plates, Delrin grab irons and air hoses.

#130 weighted	less T/C	**$9.95**
131 light		
132 weighted	with Grandt trks,	
133 light	Kadee cpl.	$15.70
801 Thinfilm decals for gon or flat		$ 1.25

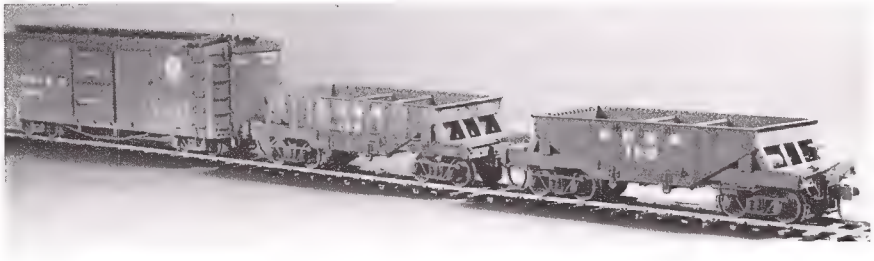
D&RGW Idler Flat

Made from high side gons. One needed on each end of every pipe gon to accommodate pipe overhang. Kit has same high quality parts as the Pipe Gon. Covers all the high side gon series rebuilt to idler flats.

#134 weighted	less T/C	**$8.95**
135 light		
136 weighted	with Grandt trks,	
137 light	Kadee cpl.	$14.70



Silver Plume & Montezuma Ore Car



This HOn3 kit represents an 18 ton ore car similar to the smaller Gilpin Tramway 2 ft. guage ore cars. Injection molded body, Westinghouse brake hardware, new 4-spoke brake wheel, lift rings, lead ballast.

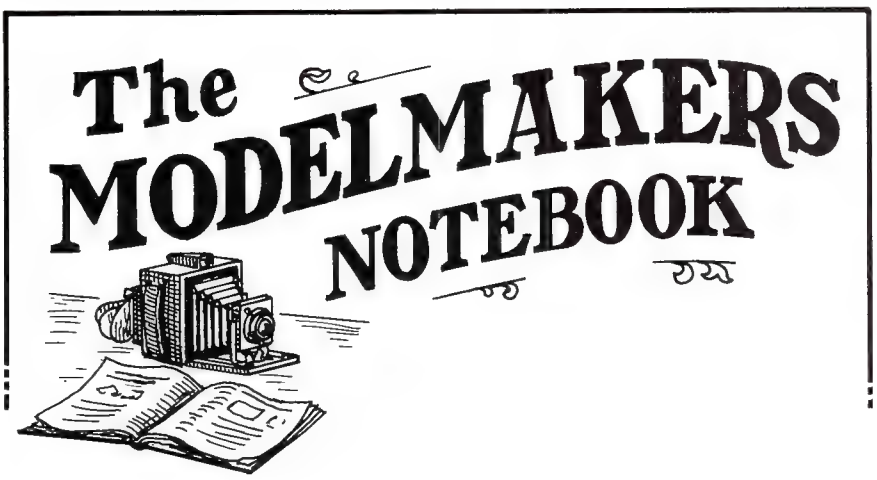
#401 23' Ore car	less T/C	**$7.95**
402 Same w/Grandt trks, Kadee cpl.		$13.50

Ask for these new kits as well as our High Side Gondola at your friendly narrow gauge dealer. If not available, send order to us with $1.50 for shipping and handling. Send long SSAE for information sheet and price list.

CLEAR CREEK MODELS

42 Greendale / St. Louis, MO 63121

HOn3 HOn3



How All Those Nice Detail Parts Are Made

by Al Armitage
Photos by the author

Nearly everyone, I'm sure, has heard of the "lost wax" process for producing brass castings, but relatively few have been lucky enough to observe the process first hand. Several hundred convention-goers were afforded that opportunity last spring at the Sacramento PCR Convention, since one of the "tours" on the program was a trip through the Precision Scale Co. plant in nearby Woodland. Those who spoke to me afterward seemed to enjoy the tour immensely and were very surprised at the complexities inherent in the process. In fact, one of the most frequent comments was, "Now, I can understand why those parts cost so much!"

It occurred to me that perhaps a little information on the technique might be of interest to readers who are not really familiar with this type of casting, and how important it has become to our hobby in recent years.

Investment casting, as it is more properly called, is not a new process by any means, having been used by several ancient civilizations, in various forms, primarily in the casting of statuary, jewelry, etc., in gold, silver, and bronze. A primitive method of obtaining the centrifugal force, necessary to inject the metal into the mold, was simply swinging the mold around one's head on the end of a cord.

In modern times, the process is used in dental work as well as various other commercial applications such as small machine parts, and instrument components, which must be held to close tolerances or to minimize further machining. It is particularly suited to the production of parts of such configuration as to be difficult, or impossible, to produce by other methods or where the metal must be brass, bronze, or silver which cannot be "die-cast".

Although more costly than other methods, because of the number of steps involved, the chief advantage of investment casting lies in its ability to produce castings of any configuration with unlimited detail. This is possible because the final "mold" is a solid chunk of plaster containing multiple "cavities" but which does not have a "parting line".

Other methods of casting require "split" molds which must be designed to come apart, at a parting line, in order to remove the casting. The mold is re-usable, in this case, but is limited to parts which have no "under cuts" to "trap" the part in the mold. Metal dies fall into this category, of course, but other "hard" materials may be used such as plaster, epoxy, etc. Molds for sand casting of metals are in this class, also.

With investment casting, the final mold must be destroyed to get at the castings so a new mold must be made for each "run" of parts.

So let's go through the process, from start to finish, and see just what is involved in the making of a generator, a truck frame, or an air compressor.

The first requirement is a "pattern" in three-dimensional form of the part to be produced. This can be produced in two ways. One is to hand-build the part, the other is to cut a metal die to produce the part in plastic. The plastic "shot" then becomes the pattern and one is required for every casting desired for the run. A die is an ideal way to make such items as truck sides, locomotive frames, cab sides, or other "two-sided" parts. Dies are also used to make separate pieces which can be assembled into a single complex part. A good example of this is a Shay cylinder with bracket, valve guide, and tumbling shaft bearings, all in one piece. Six pieces are bonded together to make the final pattern. However, all the pieces must be such that individually they can be made in a slit mold.

More complicated items such as water pumps, generators, and the smaller detail parts, are better suited to rubber molds. So, also, are larger accessories like a Delta trailing truck, for example. For these parts, a brass pattern is made four percent larger as a rule, to allow for "shrinkage" in the mold. Some components of a pattern can be machined while others are milled, or hand filed, to shape. All parts must be assembled with silver solder or be "pinned" in place to withstand the heat and pressure of the vulcanizing press. A lot of time and highly skilled effort is required to make some of the exquisitely detailed parts you see on model locomotives available today. And when you consider that PSC has over 5000 of these parts, in O and HO scale, you begin to realize the prodigious amount of work (and money) involved in the pattern work alone.

Once the brass pattern is made, the next step is the rubber mold, which is made by "squeezing" two pieces of special rubber around the pattern in the previously mentioned vulcanizing press (Photo 1). The press heats the rubber to the point where it will "flow" under pressure molding itself around and into all contours and crevices of the pattern and vulcanizing into one solid piece of rubber. When cool, the rubber is carefully cut apart all around the pattern, leaving an irregular surface, as shown in Photo 2. This uneven surface provides the "registration", when the mold is in use, so that both halves will match properly. Since the rubber is very tough and fleixible the mold can be spread open in any direction, to release the waxes. Secondary cuts are often made in one, or both, mold surfaces to facilitate easy removal of fragile wax "patterns" with undercuts or protuberances. A "sprue" is required in all molds as a means of getting the hot wax into the mold and is usually built into the brass pattern.

In use, the mold is held between two metal plates with the sprue against the nozzle of the wax pot, as shown in Photo 3. Hot wax is injected into the mold under mild pressure to ensure filling all parts of the cavity. When cool, the wax is carefully removed and set aside to harden before being "treed". Any number of waxes can be produced from a rubber mold which in most cases has a long, useful life.

The wax used is a specially compounded formula of several types of wax such as beeswax, carnauba, and others, and is in a liquid state when it is injected into the mold.

Plastic counterparts of the waxes are produced in a die, usually of brass, in which the cavity has been machined by pantograph, or milling machine, to the required shape. An example of a typical die

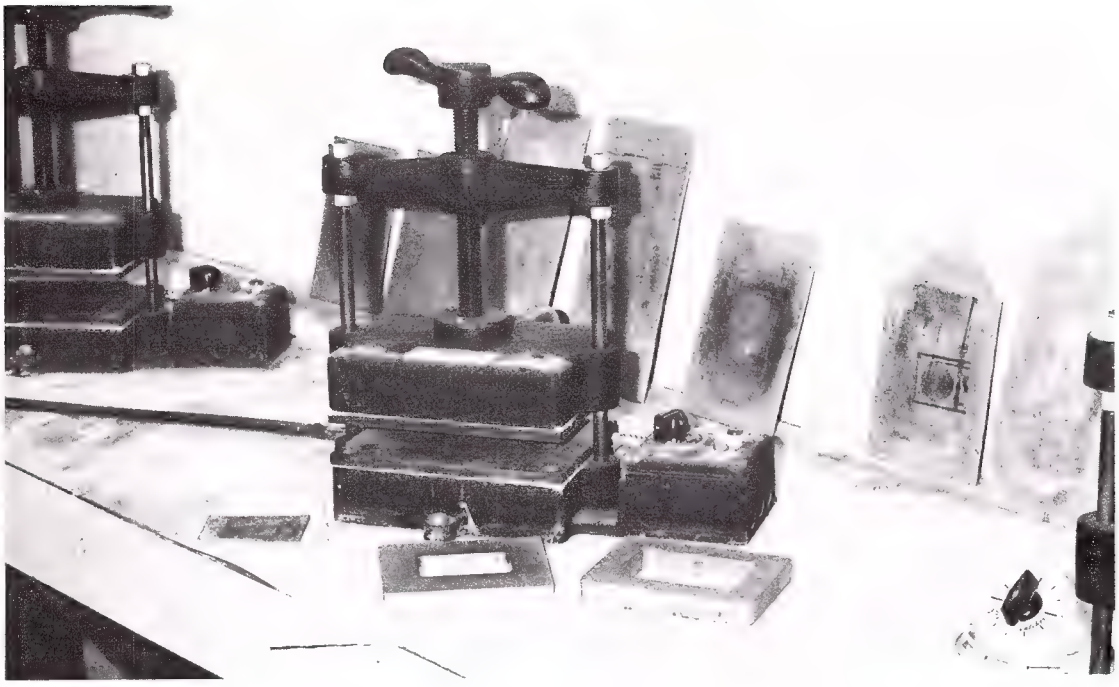


Photo 1: A vulcanizing press with two of the forms for making molds. In the foreground is the strip of rubber which is cut to fit the form.

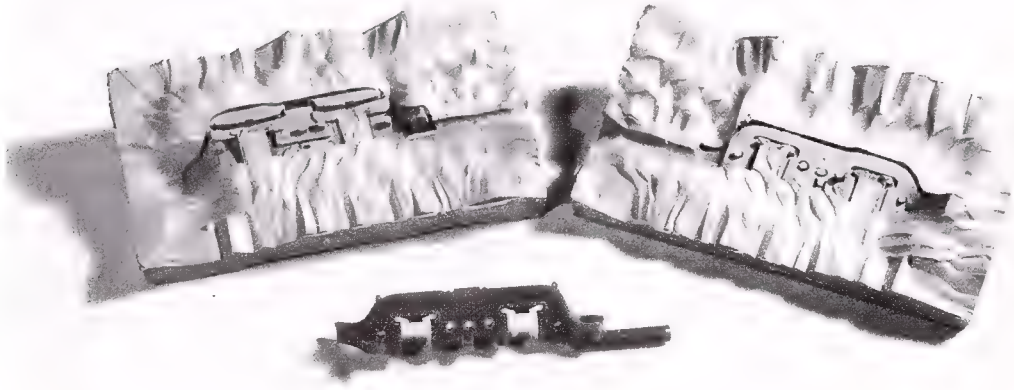


Photo 2: A finished rubber mold and a wax "pattern" produced in it. Note the "sprue" in each half at the center of the photo.

Photo 3: The wax pot keeps the wax in a liquid state with the temperature controlled thermostatically. Several molds can be seen beside and behind the pot. Finished waxes are in the trays.

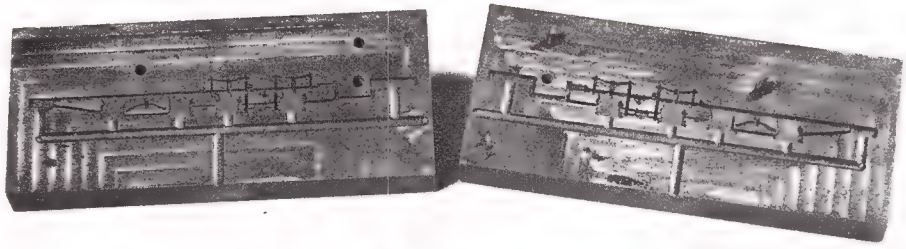
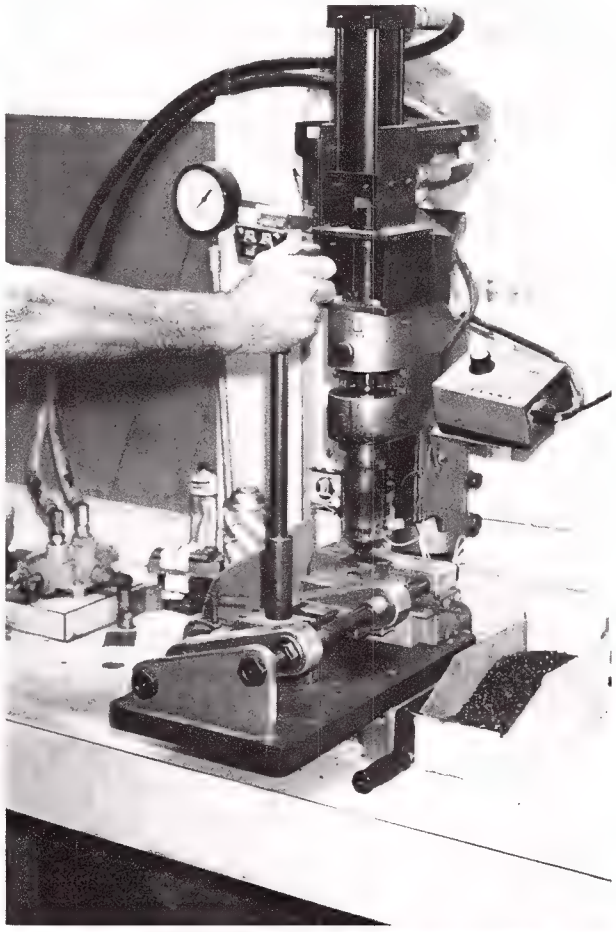


Photo 4: A die to produce plastic shots of a locomotive frame. Note the sprue and the long "runner" to carry plastic to all parts of the die rapidly.

Photo 5: A small injection molding machine which melts the styrene and forces it into the die. The box at the right contains granules of plastic which are fed into the heating chamber at regular intervals.



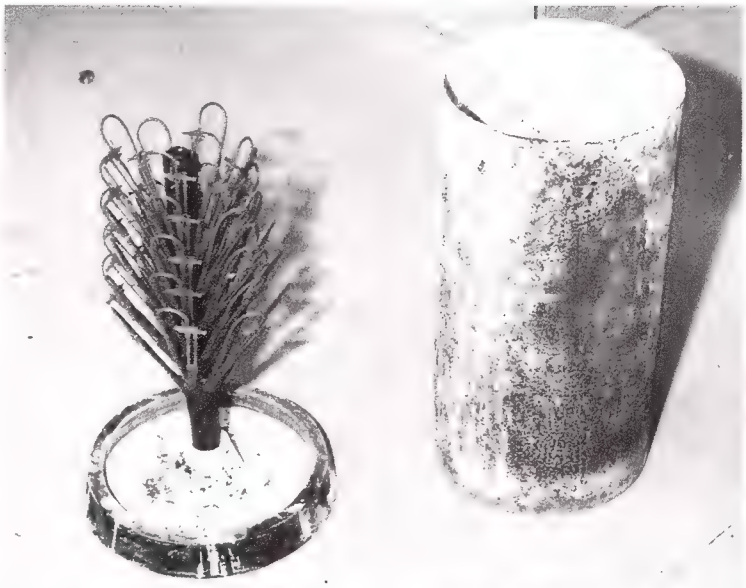


Photo 6: A tree ready for the can (steel tubing) to be positioned over it and seated in the rubber base.

Photo 7: The centrifuge inside the safety shield with a "can" and the reservoir in place. Out of sight in the photo is a counterweight attached to the left end of the arm.

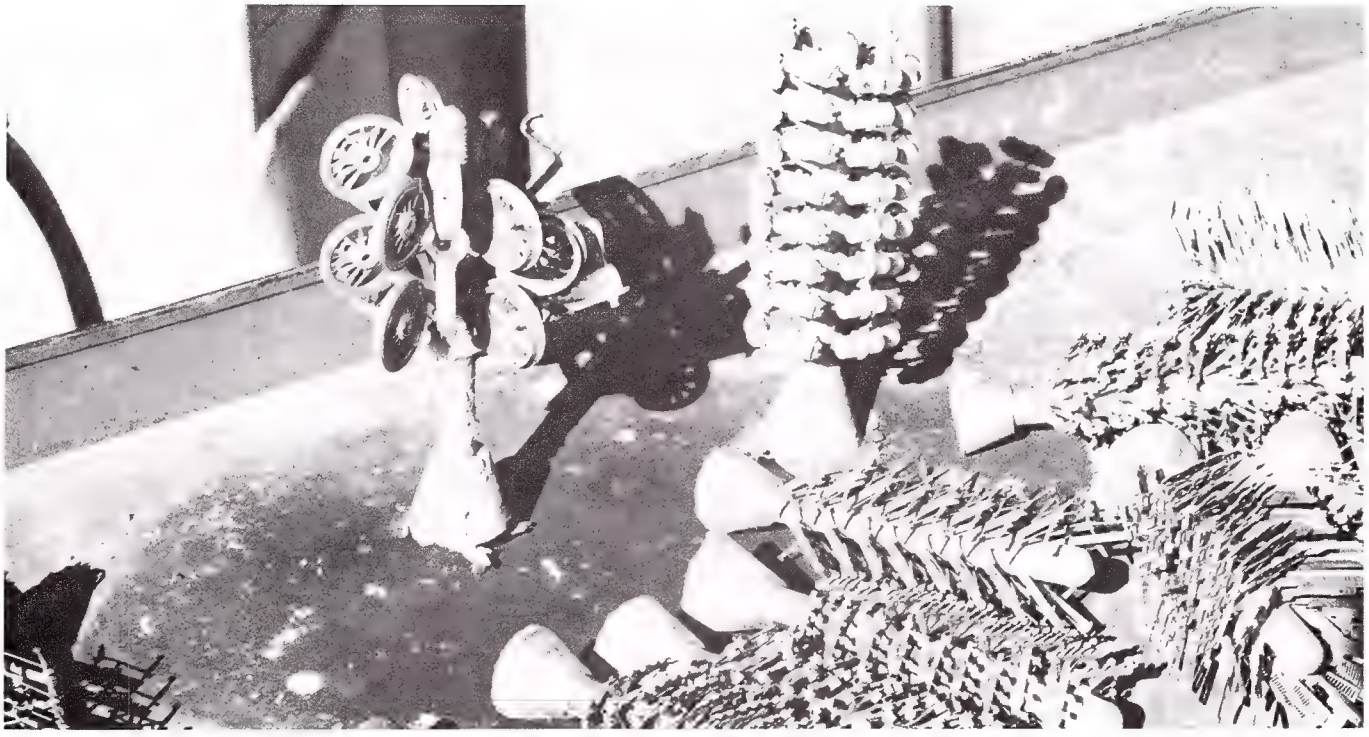


Photo 8: Finished trees of castings after removal from the molds and clean-up.

is shown in Photo 4. Since a die has smooth parting surfaces, registration "pins" are used to align the two units which are then mounted in an injection molding machine (Photo 5). Melted styrene is injected, under pressure, into the cavity and the resulting "shot" is ready to be "treed" like the waxes.

At this stage of the process, we have the necessary wax and plastic patterns with which to make the final plaster mold in which the actual casting will be done but we are still a long way from the castings themselves.

The "tree" I've been talking about is simply a wax core to which the waxes or plastic shots are fastened in varying numbers depending on their size, and shape. This core serves as the sprue to carry the molten brass into the plaster mold. Photo 6 shows a completed tree set in a rubber base and the investment "can" that goes with it. Several hundred small items can be included in a single tree while relatively few large parts, like truck sides, will fit within the limits of a can. At least two sizes of cans are used at PSC, the smaller one is shown. Parts can be close together but must not touch since the plaster has to completely surround each part in order to form a proper cavity.

When complete, the tree is set up in the rubber base along with the can and is ready for the plaster investment. This is a special plaster, mixed and poured into each can, and then vibrated to eliminate air bubbles. When the plaster has set, the rubber base is removed and the cans placed in the furnace for the "burn-out" stage which requires several hours at elevated temperatures. During this time, the wax (or the plastic) not only melts but is totally consumed, leaving empty cavities in the plaster, thus the term "lost wax" casting. We now have a plaster mold with multiple cavities in it that is finally ready for the casting stage.

The plaster mold is placed in a large centrifuge (Photo 7), molten metal is poured into the reservoir, and the machine whirls the mold around in a circle at the end of the arm. The centrifugal force thus generated feeds the metal through the core and into all parts of each cavity.

The next step is to get the parts out of the mold and the only way to do this is to break away the plaster until the bulk of it has been removed. The remainder is soaked in a bath to soften the plaster which can then be more easily removed from holes and crevices.

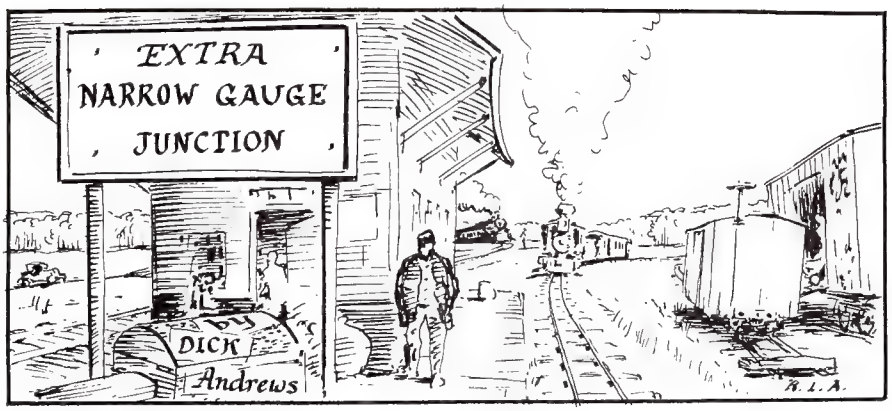
Next, the tree of castings gets a bath in a mild "bright dip" to eliminate any discoloration and give the castings a consistently clean, brass color. This makes the parts more attractive alone or when mounted on a brass locomotive model The bright dip also removes any contaminants, making it easier to solder the parts in place. Photo 8 shows a group of castings that are ready to be "clipped" from the trees, inspected for flaws, and put in "bins" for future packaging. With an inventory of over 5000 parts, in O and HO scale, a considerable amount of storage space is needed so limited numbers of each part are produced as needed to maintain the inventory.

A large percentage of PSC's production is for "bulk" orders containing parts for a specific locomotive model for one of the several importers for whom PSC does such work. These parts are shipped directly to Japan or Korea to the builder who constructs the models.

Other parts are packaged or made up into kits for sale to modelers through dealers. And when we run out of a given part the whole process starts all over again.

Complex, time-consuming, and expensive? Yes, indeed, but the only way to accomplish the detail you see on nearly every model locomotive built today, either custom or commercial. Without this process few if any of the highly detailed parts, and accessories we take for granted on our models would be available. Very, very few modelers are capable of scratch-building all these detail parts for their engines. Some of us old-timers remember the early sand-cast parts that were produced by such companies as Lobaugh, Lee Green, Saginaw, and others in O scale only. Limited mostly to truck sides, cylinder blocks, smoke box fronts, etc. with rather crude detail, they were a far cry from the much more complete and beautifully detailed parts produced today by the investment casting process. Nowadays a commercial model is often the equal of some of the best scratch-built models. Perhaps now you can better appreciate why.

AL—O



by Dick Andrews

The Maine two footers still live – at Edaville. We visited the Edaville RR again this summer, at South Carver, Massachusetts (between Boston and New Bedford, near Cape Cod). It is well worth a long visit for there is much to see.

The late Ellis D. Atwood, a cranberry grower, was a rail fan. He also had a feel for small gauge pikes because light portable two-foot gauge tracks and dump cars are sometimes used to sand cranberry bogs. Along with many other fans, Mr. Atwood went to Bridgton, Maine, during the 1930's and rode the Bridgton & Harrison Railway. As abandonment became certain, various fans were buying items of equipment simply to preserve them, and Ellis Atwood bought 2-4-4T Forney #7 and some cars. The track came up in the fall of 1941 and #7 and #8 and assorted passenger and freight cars sat out World War II in the junction yard.

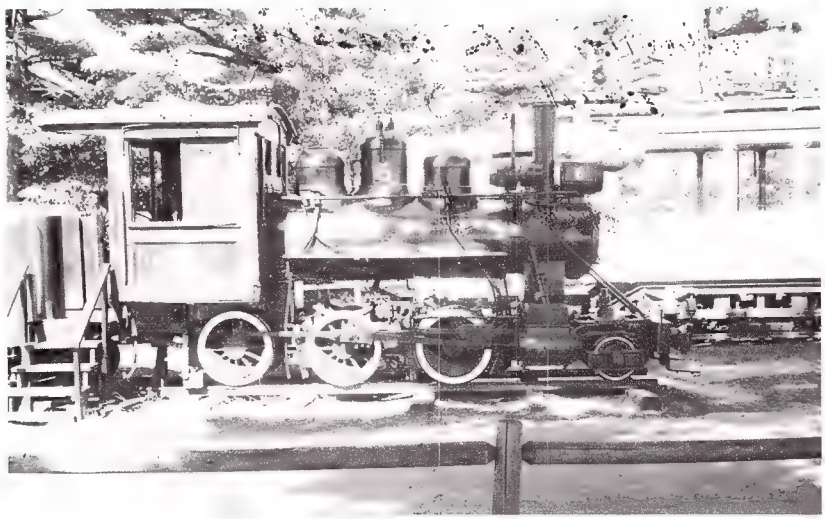
Ellis Atwood had the means to set up a new two-footer and the place for it – his cranberry plantation at South Carver, Massachusetts. (The brand name is "Ocean Spray".) A five and one-half mile loop of track was laid out around the place, and the job of moving the equipment down from Maine started. A flat bed trailer with a track laid on the bed was used, and this can be seen at Edaville along with the unloading pier with its gantry frame. Mr. Atwood bought out the other owners, and then Lin Moody helped locate the little Monson 0-4-4T Forneys in a Buffalo, New York scrap yard. Of the four locomotives, only #7 was serviceable at first, but gradually all four were put back into fine shape. The other remaining treasure trove of two-foot gauge RR relics in Maine was that of the various passenger cars and cabooses of the Sandy River system which local people had saved from the wrecker, and Mr. Atwood now brought them down to Edaville including the wonderful two-foot gauge parlor car "Rangeley". This is the basis of the working two-foot gauge steam line – the Edaville RR – which provides rides over the five mile loop almost hourly during the summer months and on weekends further off season.

There are also many static exhibits at Edaville – some outdoors and some indoors. There are old Mack trucks and steam rollers and fire engines. Indoors there is quite an old car show and one of these "old cars" is the Model T Ford rebuilt to two-foot gauge by Lee Stinchfield, master mechanic of the SR&RL, as the private vehicle of Superintendent Vose. It is a choice item.

One locomotive on exhibit is ex-Argent Lumber Company #4. This little mill is a Porter 2-8-0, class of 1909, and she has 30-inch diameter drivers arranged under a

Right: Front view of Godchaux #6 showing her upwards extended cylinder saddle. *Photo by Dick Andrews.*

Godchaux #6 2-6-0 built by Davenport in 1907. *Photo by Dick Andrews.*



36 inch diameter boiler. When you consider that a typical "Colorado" 2-8-0 had a 48 inch diameter boiler barrel over three-foot wheels, the small size of this Porter unit begins to become evident – and she *is* 36 inch gauge.

Yet ex-Argent #4 looms large in comparison to another three-foot gauge locomotive on exhibit – ex-Godchaux #6. If someone had deliberately set out to solve the space problem for "n3" modelers by producing an irresistible little mini-Mogul, he could hardly have improved on the #6 of this famous sugar cane tramway in Louisiana. She is a doll.

What is more surprising about her is that she was not always a 2-6-0; she started out in life as an 0-4-4T Forney. Most rebuilds miss out on looks, but the only "give away" you'll note on #6 is the extension on her cylinder saddle to raise the boiler. With a pair of drivers "aft" under the cab and firebox, the boiler had to come up so that the firebox would clear. Why did they do this? A small 0-4-4T Forney would seem small enough and light enough for anyone. But it seems that on the Louisiana sugar lines, the ground is soft and rail is light. The extra set of drivers under the weight of a given power plant cut unit axle loading considerably.

In fact 0-6-4T Forneys of small size were built for these Louisiana sugar roads by Porter, and also very small 0-4-0's that were not tank locomotives at all, but carried their water on separate tenders. This is one of the most charming little mills I've encountered and it was a delight to find her there.

The use of geared locomotives was common on logging roads throughout Appalachia (the mountainous area from Georgia to Maine) – Mason Lumber Company's Climax #4 at Edaville came from this West Virginia line.

Unexpected was a locomotive from Mexico. This is FCM's Zacastan branch #12. She is 30-inch gauge (they had 24, 30 and 36 inches down there) and is a 2-8-0 with outside frames. The boiler has a 54-inch girth and the drivers are 30 inches. A nice mill except I don't really like the Mexican pattern of a sawed-off stack – lower than the sand dome just behind it. Baldwin built her in 1910.

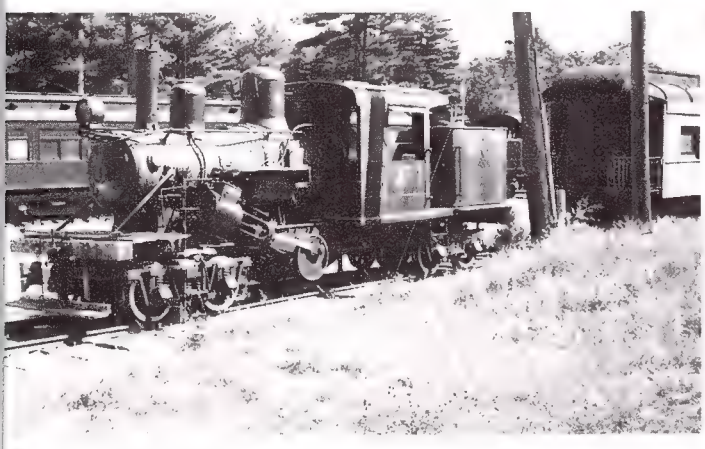
For those whose preferred wheel arrangement is just "one in each corner", the exhibit includes some goodies. My pet is a Henschel (1936) well-tank 0-4-0T. If this type is laid out with even half an eye on the drawing board, it always makes for a neat plan, and the boiler and domes are in the clear as the water tank is between the deep "plate" frames. Those seeming short "side tanks" are for coal. With the tank between the frames, the valve gear must be outside. I have seen this type with outside Stephenson gear; but this is a neat Walschaert's rig. Sometimes the plate frames are outside type. On this little mill, the drivers are 24 inches diameter on 48 inch wheelbase and the 31-inch boiler barrel is 55-inch above railhead on center. The gauge is 60-centimeters, or about 23⅝ inches.

Three American-built saddle-tankers about which I could not get much background include two 30 inch gauge Porter 0-4-0T's (a size or so smaller than Grandt's current offering). The drivers are 26-inch diameter on a 48-inch wheelbase. Number 10's cab is but 60 inches wide which suggests that she was used on very sharp curves, as the narrow end sheet reduces the overhang of the locomotive outside the rail. A larger 0-4-0T of 42-inch gauge is about the size of the Grandt model, and her front end arrangement spells "coal mine tram" as there is a buffer block, quite square, on either side of the coupler. This puts the "nudge point" on pushing moves well inside of the track centerline on curves.

I would have liked to have made photos of ex-Bridgton & Harrison #7 and #8 and ex-Monson #4, but those kettles – in fine running shape, it seems – sat inside the engine shed while I was there. Ex-Monson #3 was "hot" for the day, and let us note, there is nothing to compare with a steam locomotive – in steam. She snorted, whooshed, whistled, chuffed, and even blew off the boiler on occasion, and as quite the shortest unit on a train of varied passenger cars, open cars and a caboose, bustled along in fine style. She has a fake diamond stack and old headlamp, and three wide brass bands around her boiler which flashed handsomely in the sun.

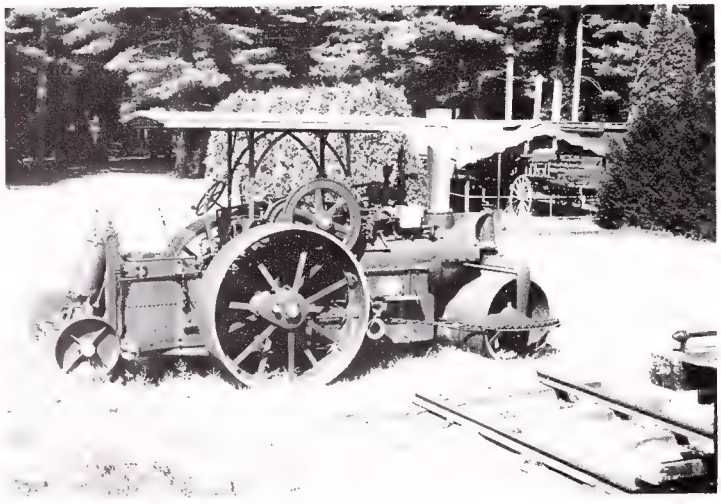
Edaville has been planned to keep kids happy with a merry-go-around, fire engine rides, a puppet show and so on. Wives will enjoy the exhibit of old stores and merchandise inside the museum ... shops of one hundred years ago. A peppy jazz band sent trains off and welcomed them back. A restaurant in an old station is very pleasant. So the whole family can enjoy several hours there while you get down to the nitty and the gritty! It is almost all we have

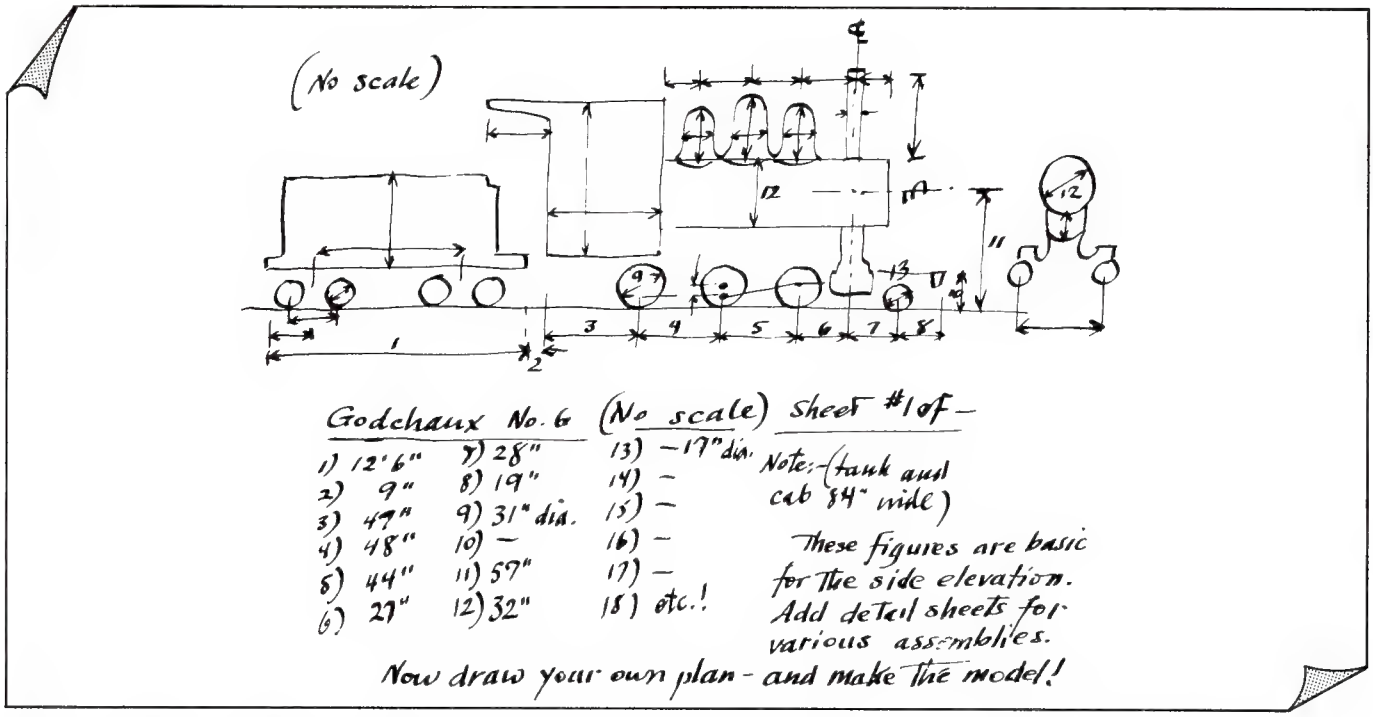
Left: Edaville #3, ex-Monson #3, built by Vulcan in 1912. *Photo by Dick Andrews.*



Below left: Mason Lumber Company #4 on display at Edaville. *Photo by Dick Andrews.*

Steam roller on exhibit at Edaville. *Photo by Dick Andrews.*




(No scale)
Godchaux No. 6 (No scale) Sheet #1 of –
1) 12'6" 7) 28" 13) –17" dia.
2) 9" 8) 19" 14) –
3) 47" 9) 31" dia. 15) –
4) 48" 10) – 16) –
5) 44" 11) 57" 17) –
6) 27" 12) 32" 18) etc.!
Note: (tank and cab 84" wide)
These figures are basic for the side elevation. Add detail sheets for various assemblies.
Now draw your own plan - and make the model!

left of the Maine two-footers and how lucky we are. Mr. Atwood passed away many years ago, but he built well. He was a quiet man and I think quite delighted that the public enjoyed sharing his Edaville Railroad.

Last time in this column we mentioned Hugh Boutell, who so far as we know, was *the* pioneer narrow gauge model railroader, and in two-foot gauge at that. By around 1941, interest was growing in modeling the three-footers as well, and when I got back from Europe in 1945, I began to make contact with a thriving group which was loosely known as the Narrow Gauge Guild. This group of fellows numbered not more than about twelve, and were modeling in On3 and On2. Although scattered all over the U.S., they had found each other and kept a circuit letter going around the loop. I was privileged to join them in 1947. This original group included Jack Alexander, Kirk Comstock, Vincent Ryan, Ted Collins, Fred Stoes, Mark Swerdfeger (now NMRA Narrow Gauge Committee chairman), John Maxwell (well known for his Colorado RR research), and Cameron Brown who was building an On2 model of SR&RL #6. Before very long, Cliff Grandt was aboard, and Kirk Dunwoody, Bob Smith and others. All members of this group still living are in touch, for we shared and share something vital.

How do you work in a "gauge" when there is no such "gauge" on sale in the shops? The magazines then ran no articles on narrow gauge. Books were few. A few of us were top craftsmen; most were not. I sure wasn't. First of all, we did our homework. We researched narrow gauge railroads, often measuring equipment in the field. We shared information and our plans were often of our own make. I measured up many items at Edaville long ago, and some of my data was used by Temple Crittenden of Norfolk, Virginia, for the drawings he made so well which are still sold. Here is how to do this job.

Draw up your locomotive or car ahead of time in side elevation, front view, back, top, etc. Establish the basic dimensions between centers and other such measurements that you wish to have. Give each such dimension a number on your rough sketch, and then list those numbers on another sheet. Now when you arrive on the scene, you will not forget some vital figure.

Make photos – by all means. You might make use of Jack Alexander's "Big Inch". This was a four-foot stick marked off in feet and set against the locomotive or car (or building). A cross bar also four feet long will help. When you get home, you'll never have enough of either measurements or photos for your scale working plans. But by following the above scheme, you'll have the basics. A set of proportional dividers will help you use photos for dimensions working from "knowns". A trick that Cliff Grandt uses is to project a transparency very large on a wall.

Also, we had going for us the tradition of O scale modeling, which was always simply that of picking a prototype, making photos, sketches and plans of your own, and then simply making the model. To be very blunt about it, the scales we use are very small, and O scale is tiny as is. But one can work brass material – bar, sheet, rod, wire, etc. – to develop locomotive superstructures. The part of a locomotive that "works" in our tiny sizes – the frame, the gears, the motor – is readily made by hand on a table. All the rest of it is fakery pure and simple, and is along for the ride.

Now for model making. In the first place, we modeled simple and smallish locomotives. What else – if you are going to make it all yourself. So no one made a K locomotive model for years and years, and I recall remarking that some day some one would, so those "wide chops" would have to be allowed for on clearance. The most popular locomotive prototype was any small 2-8-0 of C-16 type; also small Moguls. Jack had a 4-4-0.; a pretty little mill. Small 2-6-0's and 4-4-0's of about 16 to 20 tons were, after all, what powered 95 percent of all American narrow gauge roads.

What did we have to buy? Not anyone's "gauge". On3 was ¾ inches because 3 × ¼ equals that. On2 was ½ inch for the same reason. We used wheels from HO, OO and S and set them to our gauges. We used permag motors, stock gears, drill rod axles, and brass locomotive frames which are easy to make (you can do it by hand on a table). For rail HO, OO and S items served well. It took time. It cost very little. And it was great fun.

Walt Whippo, an old side kick, was for a little while into On2 early on, and he still chuckles at a memory of the two of us, late in November, calling on Ellis Atwood about 1947. Mr. Atwood was meeting with his tax experts but he spotted us through the door and waved us in – a pair of roughly clad young fellows for it was November. Walt picked the little cars out of his pockets and rolled them onto the great polished conference table.

"Look at those little cars!" exclaimed Mr. Atwood. And the tax experts dutifully bent forward in unison and looked at them.

Walt still laughs about that.

Dick

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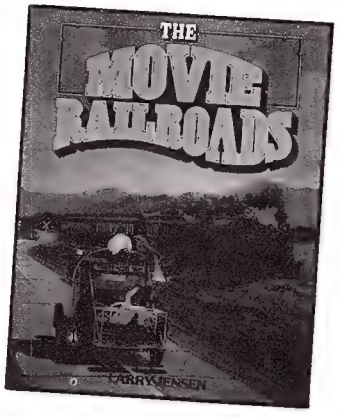

Rail and film historian Larry Jensen spent years of research, interviewed scores of actors, directors, technicians and railroaders to compile the data and photos for this unique book. It includes movie lists, casts, rail equipment rosters, location maps, promotional posters and over 350 action-packed photos.

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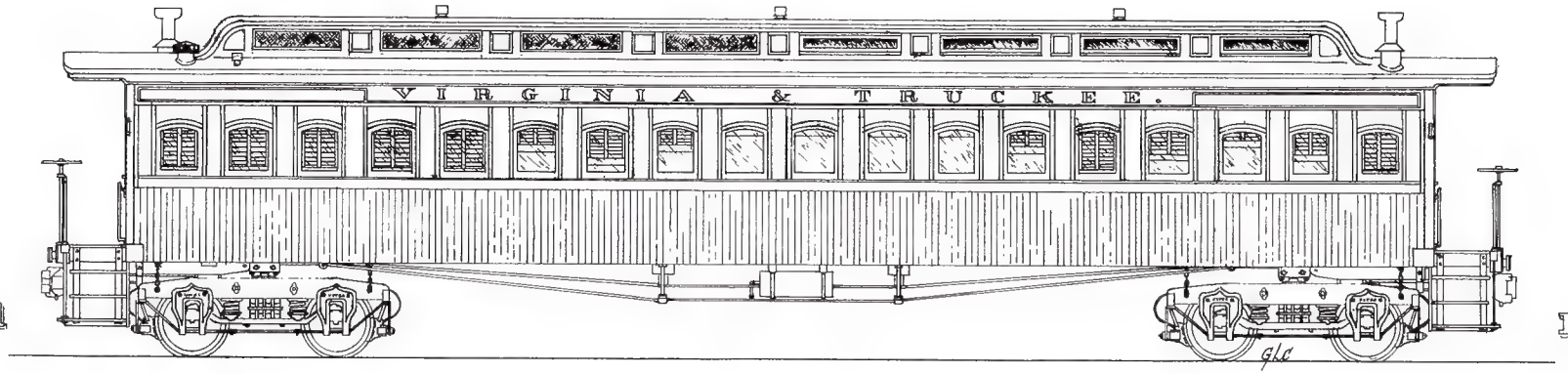
Virginia & Truckee Railroad.

Coach Number 17
circa 1925

Central Pacific Railroad Shops - 1868

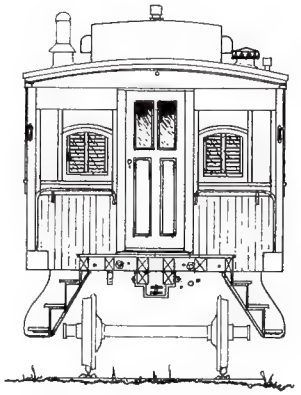
Measured and Drawn by Gary Caviglia

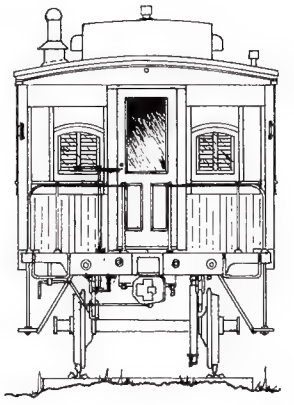
April 1980



O end

P end





SCALE

3.5mm = 1 foot

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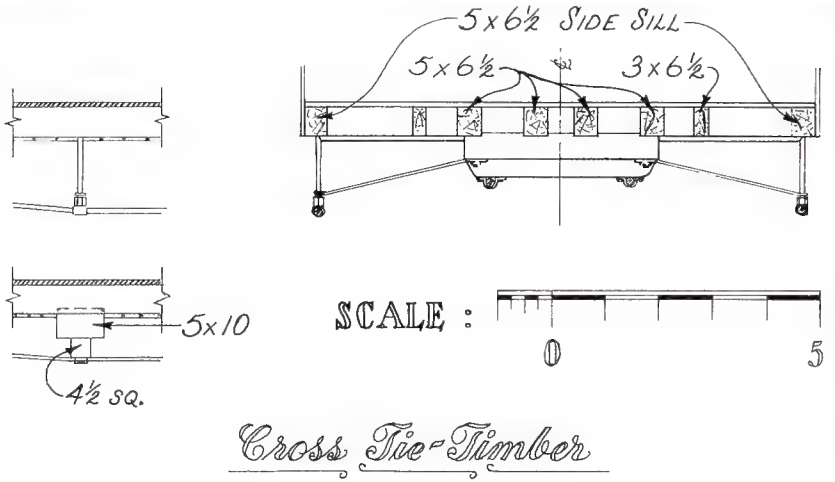
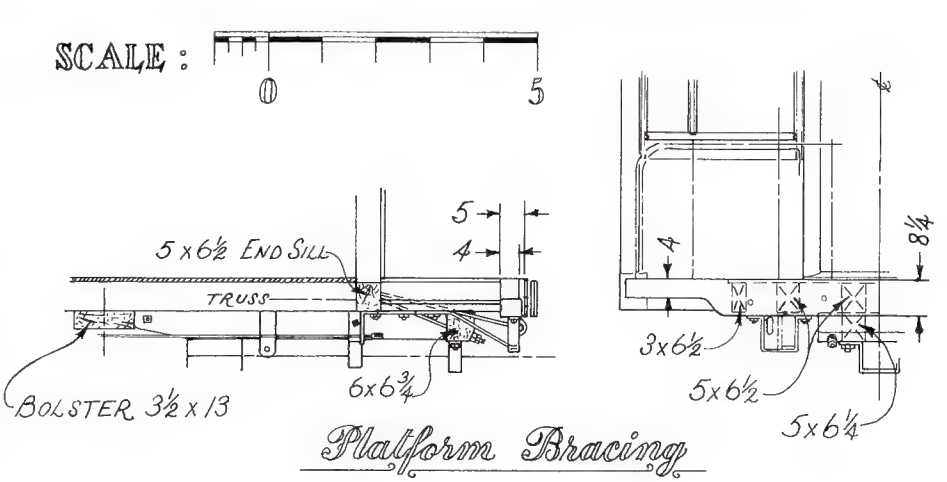
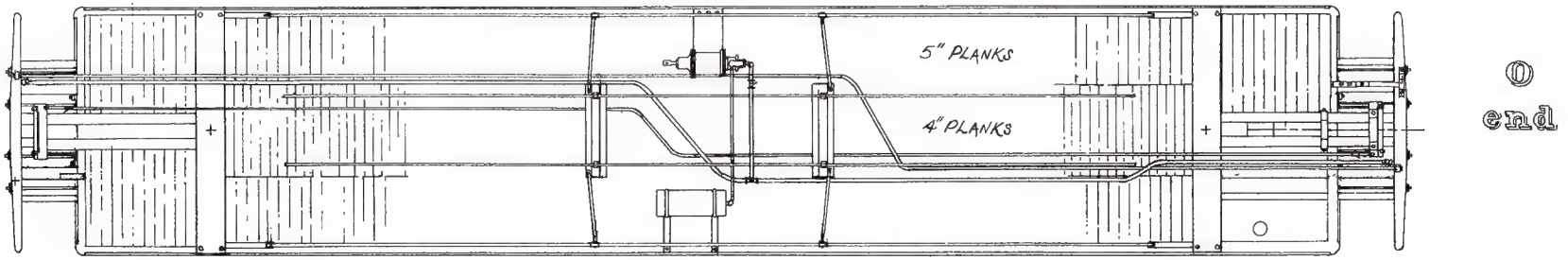


Cross Tie-Timber

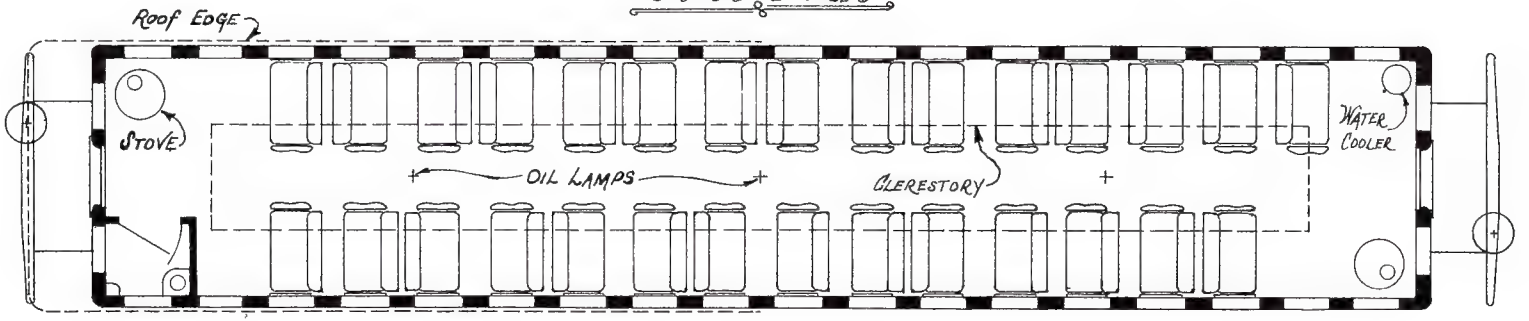


Platform Bracing

Bottom View



Floor Plan



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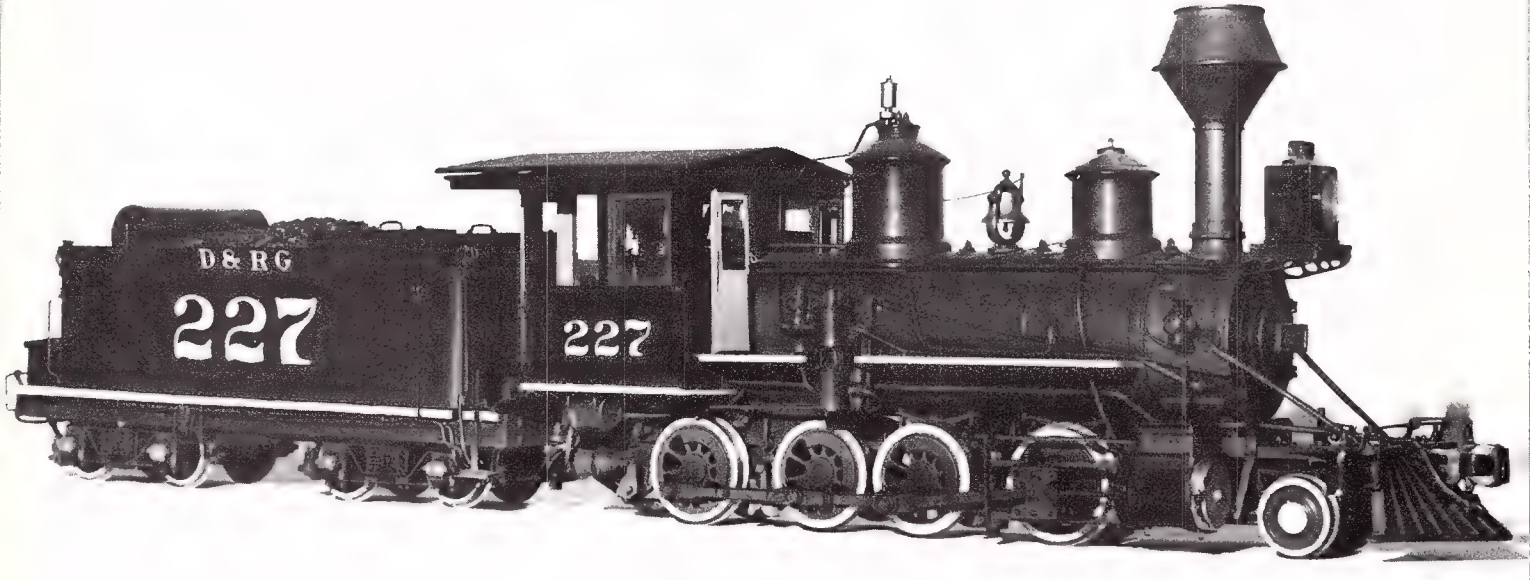
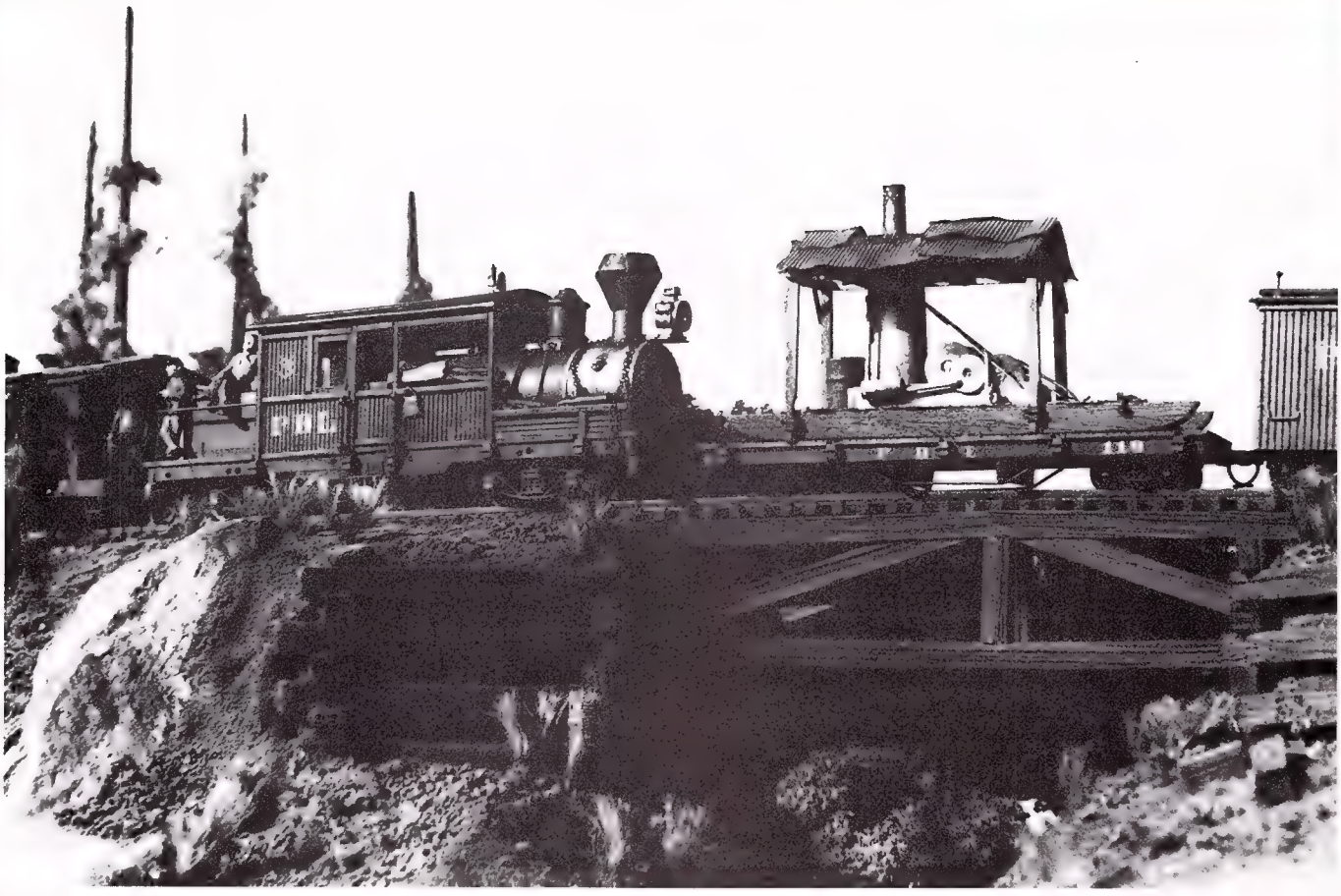
GAZETTE GALLERY

Edited by Gene Deimling

This impressive On3 stock car is the work of Jim Johnson. He used information from many sources to detail his model. The body was scratch-built using scale lumber and Grandt Line details. Jim followed prototype construction on the roof using individual boards and angle iron roof supports. All of the wood was wipe-stained with Floquil Grimy Black and Driftwood prior to assembly. The exterior was airbrushed with Floquil Weathered Black and weathered with Dust. Jim completed the car in a week of evenings. *Photo by Ray Priester.*





Would you believe that this HOn30 Class A Climax started life as an N gauge diesel? Garry Cerrone started with a Bachmann mechanism and added a scratch-built superstructure composed of wood and brass. Detail parts from Cal-Scale, Kemtron and Keystone were used to complete the job. The cars were scratch-built from wood and were equipped with Kadee N gauge trucks and couplers. Garry has built several Climax conversions for his Piney Branch Line. *Photo by Garry F. Cerrone.*

Opposite: **GAZETTE** author Kelley Morris built this On3 Grant C-60 class Consolidation. He detailed and painted this locomotive to represent the prototype's appearance in the 1908 period. Kelley's techniques for locomotive construction and painting were featured in a series starting with the September/October 1979 **GAZETTE**. The model is owned by Bill Logan. *Photo by Ray Priester.*

If you have ever wondered what to do with all those extra Grandt Line or Campbell plastic doors, here is a solution. Richard Young sent in this picture of a storage building in Tamassa, South Carolina. *Photo by Richard Young.*

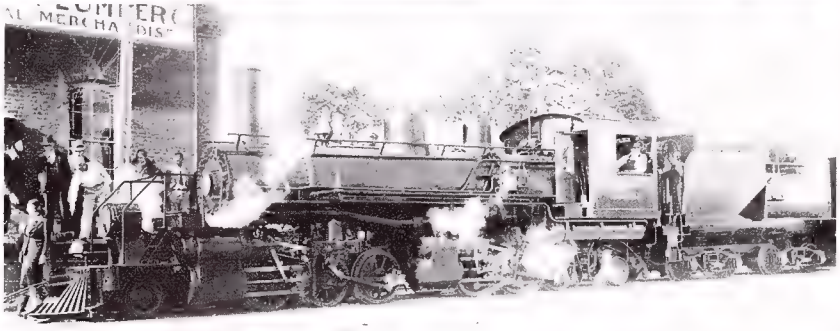
Photo by Ted Wurm.

Photo by Gene Deimling.

Dutch Flat, California contains a number of interesting buildings such as this old hotel. The town is located a few miles east of Colfax, California just off I-80. It is worth the time to see the town if you are in the area.

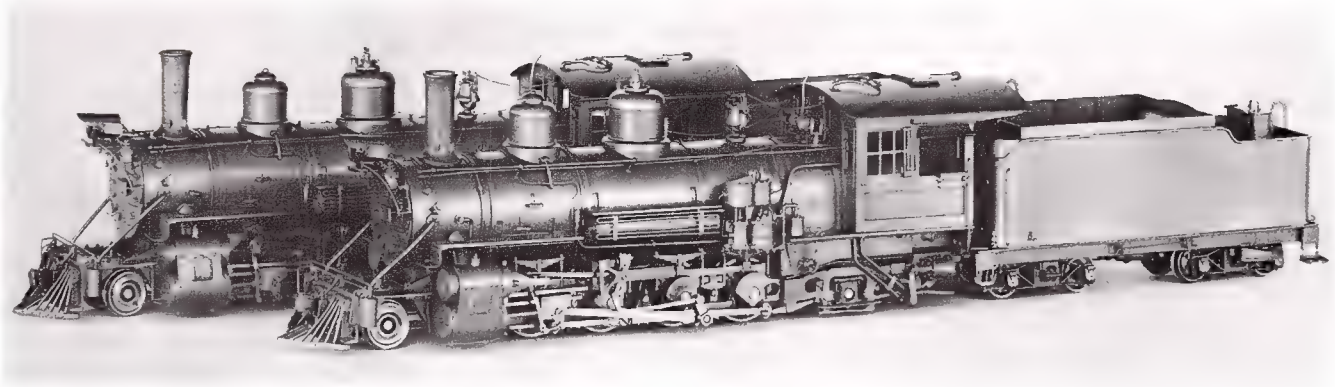
Richard Simon staged this scene with his HOn3 models to represent a Colorado Alpine meadow in the 1880's. The water tank is a Durango Press kit and the other buildings are scratch-built. The Mason Bogie was painted by Jerry Spoelma. The background is a slide which has been back-screen projected. *Photo by Van Webster.*

Urban decay is not a new phenomenon. This photo was taken in Winnipeg, Manitoba on May 2, 1928. The building was slated for destruction when the photo was taken. The signs and posters add real character to the structure. *Photo from Manitoba Archives, Foote Collection.*



The Caspar South Fork and Eastern operated two very unusual standard gauge Mallets, #5 (Trojan) and #7 (Sampson). The photos were taken during a 1938 fan trip. The pair would make great models in any scale. Any takers? *Photos, collection of Billy May.*

The affordable Sn3 K-27



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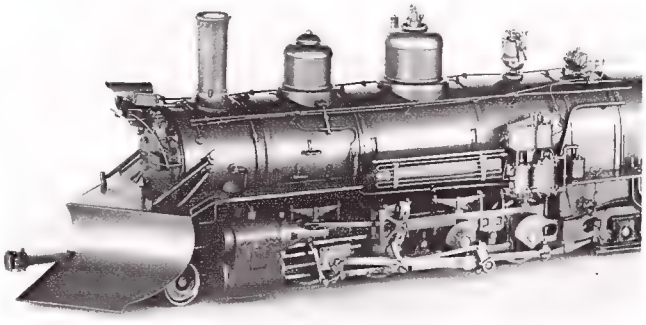

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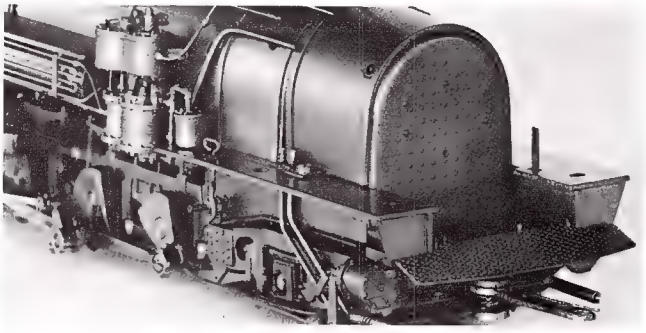

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Book Reviews

Scenery Ideas by Fine Scale Miniatures, 49 Main St., Peabody, MA 01960. Softcover, illus., 16 pages, $5.00.

This 8½×11 inch booklet is a tribute to the late John Allen. George Sellios of Finescale Miniatures wrote it as a guide for building a diorama using the John Allen series of kits offered by Finescale. The book describes in detail how to make a lake and how to make and use rock faces. It also describes laying track, ballast, trees, weeds, grass, and the hundred other little items that go into a realistic model. The booklet is well done with large clear photos showing step by step how to create your own scene. *Bob Brown.*

Narrow Gauge Railways in America by Howard Fleming, Daring Press, 5060 Navarre Rd., S. W., Canton, OH 44706, 1981. Hardcover, illus., 145 pages, $14.95.

Narrow Gauge Railways in America was first published in 1876. It was reprinted in 1949 by Grahame Hardy. Both of these editions have been out of print for many years. This new edition is a photocopy on good quality paper. The illustrations are all from the original edition and are all the detailed drawings typical of 1879. *Narrow Gauge Railways* discusses the origin of the slim lines and presents arguments in their favor. There is a chapter on the construction of narrow gauge followed by other chapters on locomotives, freight and passenger cars. The rest of the book is an alphabetical description of narrow gauge railroads in America in 1879. Each description consists of a general survey of the line plus whatever statistics were available at the time. Brian Thompson compiled a list of all the known narrow gauge railroads in America in the 1949 edition. The list includes the name of the railroad, its gauge, where it ran, its length, when it was built, if and when it was standard, gauged, and when it was abandoned. The 1981 edition updated this list to include narrow gauge railroads in Canada, Alaska, Montana, and Hawaii. The last section of *Narrow Gauge Railways* consists of advertising pages showing railroad equipment. This book is a fascinating source of narrow gauge information for both the model-builder and the railroad historian. It is a must purchase for your narrow gauge library. *Bob Brown.*

G 42, Puffing Billy's Big Brother, by The Puffing Billy Preservation Society, 1980. Softcover, illus., 65 pages.

I am sure most of you have heard of Australia's narrow gauge the Puffing Billy. This operating 2-foot 6-inch gauge line has been running for many years. In an effort to raise funds to restore one of Australia's 2-foot 6-inch gauge Beyer-Garratts, the Society has published a beautiful book describing the complete history of the locomotive they want to preserve. The locomotive is called a G class 2-6-6-2 Beyer-Garratt. The engine was built in 1925 by Beyer-Peacock, Ltd., Gorton Works, Manchester, England. The book is composed of a history of the lines using the class G locomotives, a short history of the Beyer-Garratt locomotive and a complete history of G 42. There are many black and white and full color photographs plus route maps, and a ¼ inch scale prototype fold-out plan. This book is available from McBees Hobby Center Pty. Ltd., P.O. Box 144, Coburg, Victoria 3058, Australia. The price is $7.95 per copy plus $4.45 air mail or $1.20 surface mail. McBees will accept payment by VISA, MASTER-CHARGE, AMERICAN EXPRESS or by International Draft. The prices are Australian dollars. One Australian dollar is about $1.12 U.S. *Bob Brown.*

Model Railroading with John Allen: the Story of the Fabulous HO Scale Gorre & Daphetid Railroad by Linn Westcott, Kalmbach Publishing Co., 1027 North Seventh St., Milwaukee, WI 53233, 1981. Softcover, illus., 144 pages, $21.95.

I was fortunate in that I knew John Allen. I was raised on his articles and he influenced my modeling. I saw the Gorre & Daphetid and I had dinner with John in a Monterey wharf restaurant. So I was delighted to see this new book about John and his model railroad appear in print. Linn Westcott knew John very well and his book reflects their friendship. Since Linn passed away before the book was completed it was edited by Bob Hayden. To my knowledge this is the first book published in the U.S. which describes the modeling career of one model railroader. In this book, Linn shares some of John's personal history and personality with us. Then he describes the evolution of the G&D from a small photographic setting to the wonderful layout that became so popular. Each step of John's progress is described in detail. There is a chapter on John's narrow gauge modeling, as well as material on John's philosphy and practices in operating this line. The G&D roster is described in detail as are John's maintenance procedures. Anyone contemplating the construction of a model railroad should read this book because of the practical advice offered by John. The book is lavishly illustrated with color photographs. Many of these photos are full page. There are also many black and white pictures. All of the various G&D layouts are drawn in complete detail. Several of John's preliminary planning sketches are also included. I think it is fair to say that John was one of the most famous model railroaders who ever lived. He was called the "Wizard of Monterey" for good reason. Read and enjoy this wonderful book and learn why he was called the "Wizard". I was unable to put the book down and I know you will enjoy the information, practical advice, and inspiration contained within its pages. *Bob Brown.*

The Torch, Keweenaw Railway Historical Society, 25875 Balsam Drive, Franklin, MI 48025. Loose leaf, 6-12 pages, illus., $10.00 per year.

The railroads of the Upper Peninsula of Michigan are well worth learning about and modeling. The best known of the many lines that ran in this area was the Quincy & Torch Lake. For many years a small newsletter devoted to reporting about the lines of the Upper Peninsula has been published. I think it is about time I mentioned this little newsletter again for those of you who have become interested in the copper railroads or for those of you who have never heard of the newsletter. The most recent issue was Number 16 and it contained a plan for a Q&TL rock car as well as a list of maps relating to the copper country. There was also a listing of the Shay locomotives that ran in the Upper Peninsula by George Anderson. *The Torch* lists every mention of any of the Upper Michigan lines in other publications. The editor of the *Torch* is George Anderson. Memberships in the Society are $10.00. *Bob Brown.*

NJ Custom Brass Second Edition Catalog, designed by Dave Elhardt, NJ Custom Brass, 22 West Nicholai St., Hicksville, NY 11801. Softcover, illus., not paged.

Any lover of fine models of any scale or type will love this beautiful catalog. This book is a listing of all the various imports brought in by NJ International over the past many years. There is a

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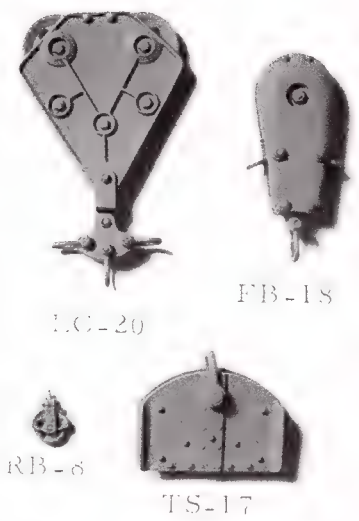

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special section on narrow gauge. Many of them are painted but several are in brass. A brief bit of prototype information is provided on each model. I find catalogs such as this one a pleasure to look through every once in awhile and they are very helpful if I want to know if a certain locomotive was ever imported. Where a color photo of a painted model is provided I also use these catalogs as painting guides. An example is the Little River 2-4-4-2 which is shown in full color fully painted in this fine catalog. *Bob Brown.*

Coach, Cabbage & Caboose, by John B. McCall, Kachina Press, 730 Fidelity Union Tower, Dallas, Texas 75201. Hardcover, illus., 256 pages, $39.95.

This is not really a book about coaches, cabbages or cabooses. It is largely about combination passenger-baggage cars, primarily wooden ones. It is subtitled, "Santa Fe Mixed Train Service", but it describes typical shortline equipment and operations.

Over half of the book is devoted to Santa Fe wooden combines. Almost every car had a different evolution and most of them acquired particular characteristics. All of the changes in ownership and the many modifications of the cars are listed. Many a wooden combine began life as a coach, a library-buffet car or even a chair car. Some were built for shortlines that later merged with the Santa Fe, while others ended their careers when they were sold to a short line. During their years of service on Santa Fe branch lines the cars were operated in mixed trains in a way little different from the way they were used on the independent short line operations.

Many photographs of these cars are reproduced in the book and they are of high quality. The majority are presented in a large format, making detail easy to see, and some are in color. Eight scale elevation drawings plus numerous floor plans are included. The information can be applied to cars built for other roads by these builders because the author supplied builders' names and building dates.

There is a 34-page chapter on steel combines and another short one on archaic side door cabooses and drovers cars. The book concludes with a chapter on Santa Fe branch line motive power, naturally smaller engines.

In addition to the in-depth analysis of branch line passenger equipment, the author gives us a terrific gallery of branchline operations. Although the name on the letterboards of the cars is that of a major first class railroad, the scenes could have been taken on many a short line. In every respect from research to graphic production this book is very well done, and it is a gold mine of data for anyone interested in short line equipment. *Joe Follmar.*

Secure the Shadow – Lachlan McLean, Colorado Mining Photographer by Duane A. Smith and Hank Wieler, Colorado School of Mines Press, Publications Department, Colorado School of Mines, Golden, CO 80401, 1980. Hardbound, illus. 100 pages, $13.50.

The Colorado School of Mines generally publishes technical books for the mining industry. This book is not technical and contains 56 early photographs taken in the Clear Creek Valley of Colorado. The book includes a brief history of the area, the photographer, and the gold and silver mining industry.

Of greatest interest to the modeler are the photographs taken from the 1870's to the 1920's. The glass negatives were only recently discovered in the University of Colorado Western History Collection by the authors. Several photos show Colorado and Southern rolling stock and there are several early street scenes. The many photographs of mines and mills show both large and small operations. The modeler can refer to several photos of mines and mills for building placement and construction. There is a photo of a mill under construction and a very useful photo showing ore-loading bins in various stages of construction.

The book includes many rare interior photographs – rare because of the technical problems related to low light and slow photographic processes. Many photos were taken in mine shafts. Several of the photos are useful because they show mining equipment which can be modeled as surface details. There are several photos taken in hoist houses showing steam-powered hoists. One picture even shows the boiler. There is a photo of a mill sorting room, a crusher, and a row of concentrating tables.

This book is a valuable reference for anyone modeling gold and silver mining or anyone interested in early mining and milling operations. *Bruce Nall.*

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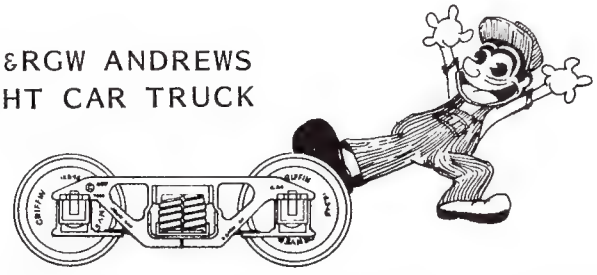

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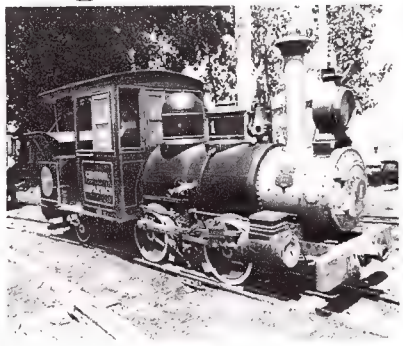

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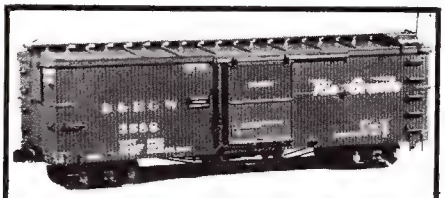

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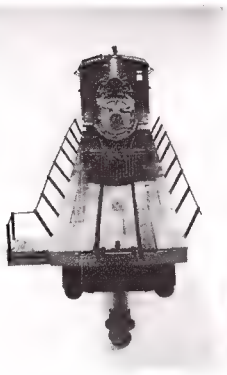

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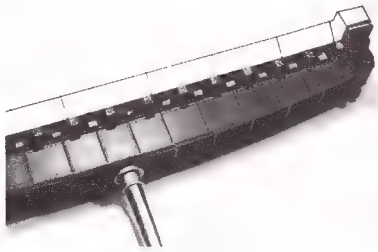

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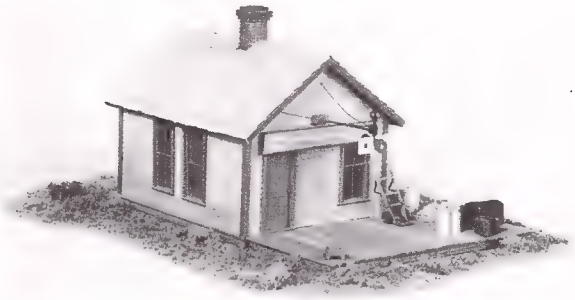

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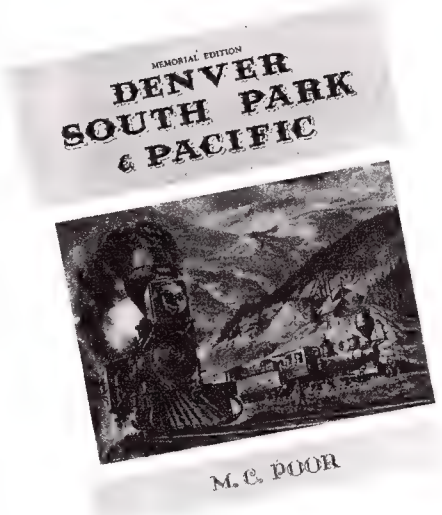

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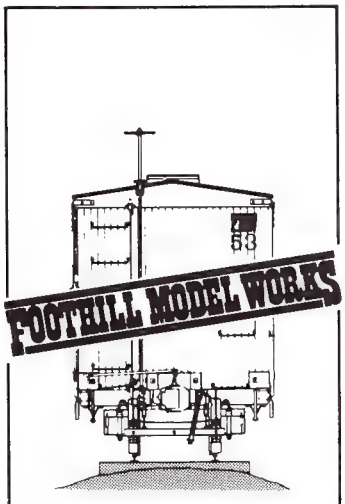

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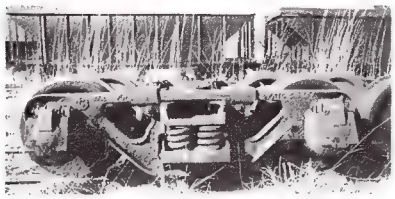

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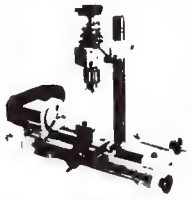

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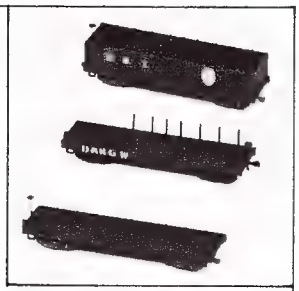

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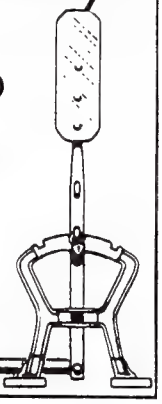

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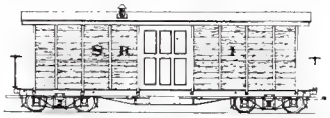

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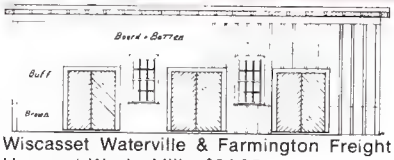

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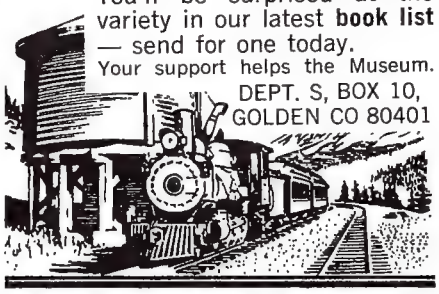

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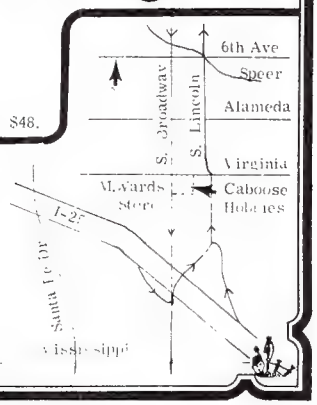

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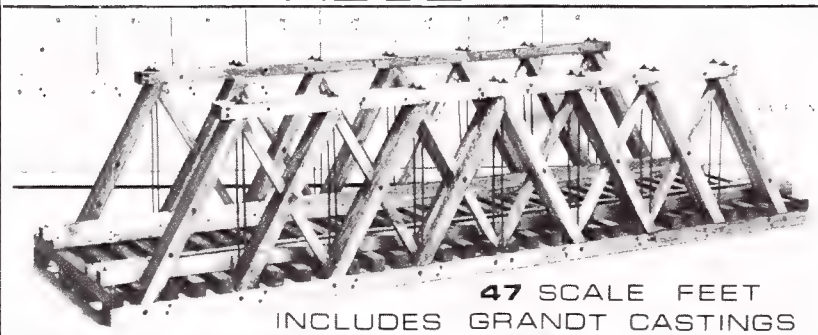

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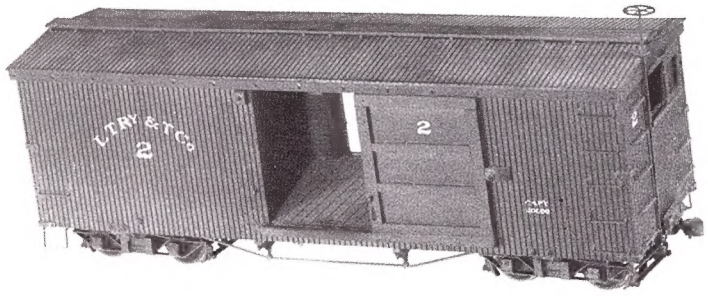

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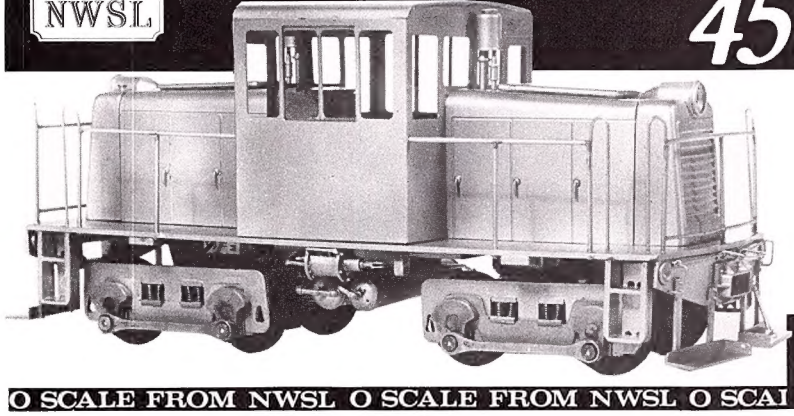

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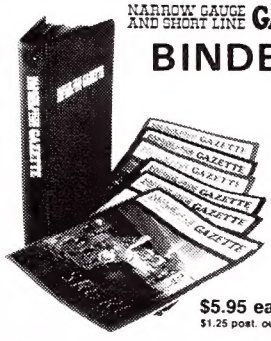

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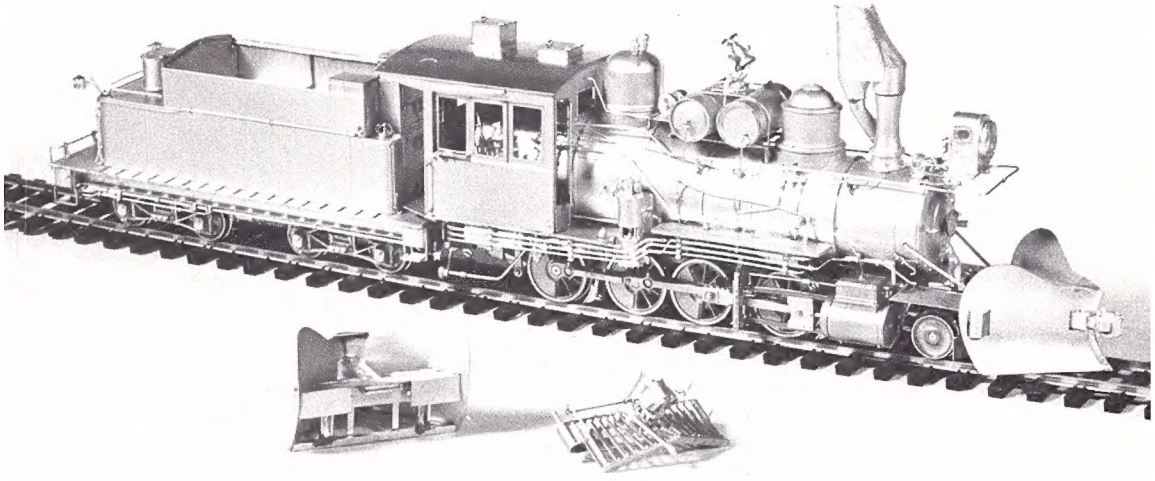

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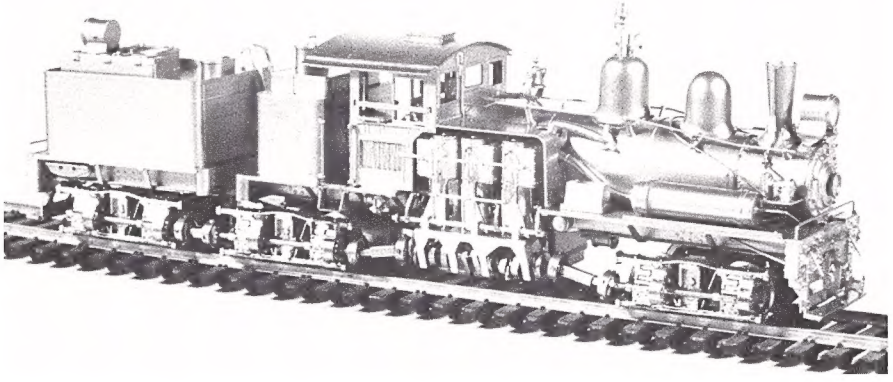

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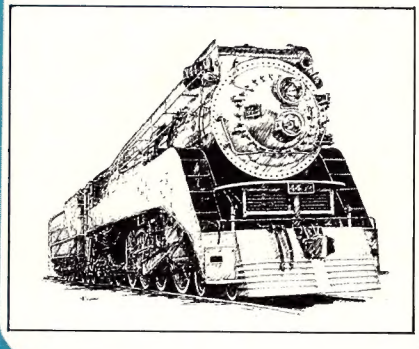

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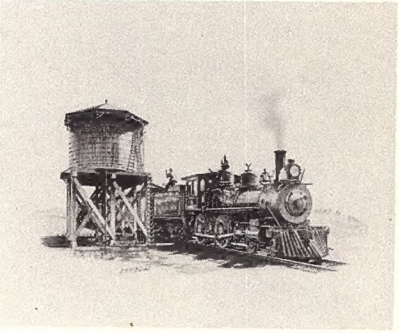

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